JANUARY 23, 1943

Railway Age

Founded in 1856

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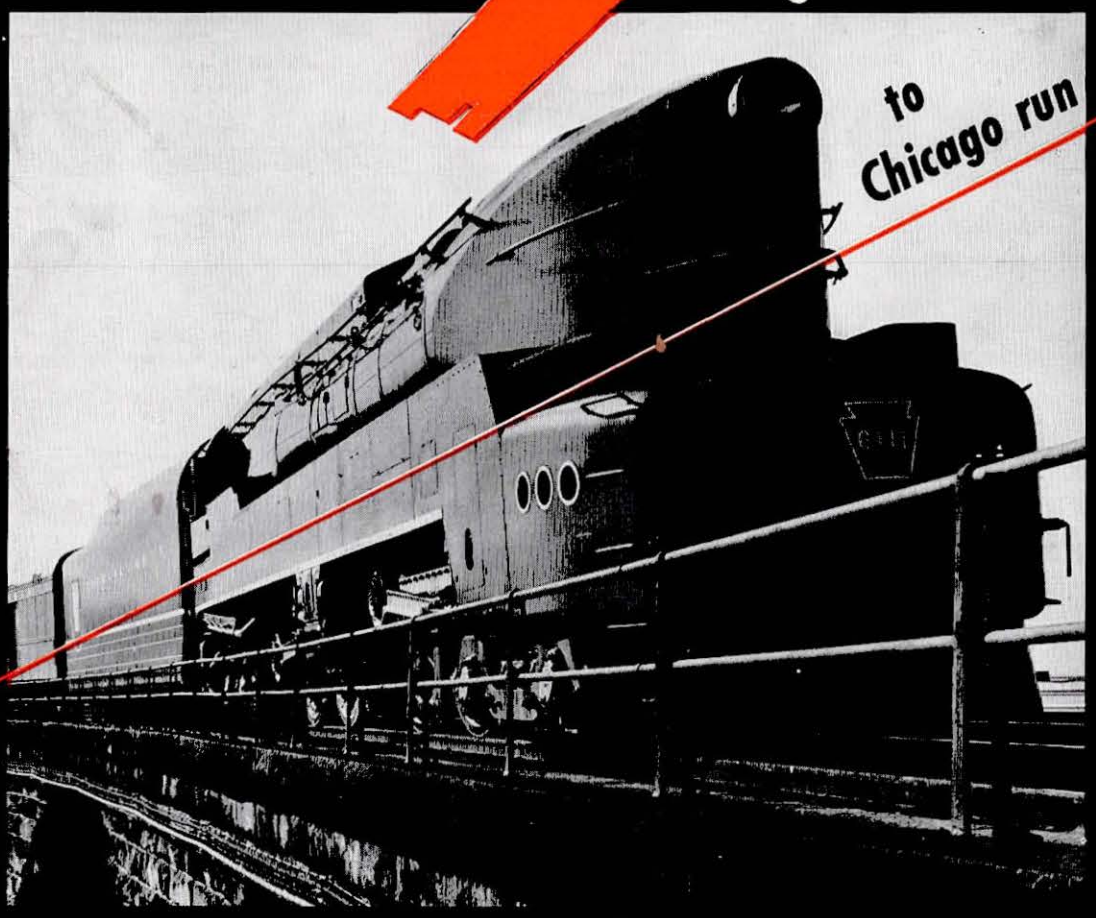
On the "Pennsy's" Harrisburg to Chicago run



. . . it's Modern Baldwin Steam Power

The new streamline T1's, now in service on the Pennsylvania from Harrisburg to Chicago, are the very latest locomotives of a large number which Baldwin has built for the Pennsylvania.

THE BALDWIN LOCOMOTIVE WORKS
Philadelphia

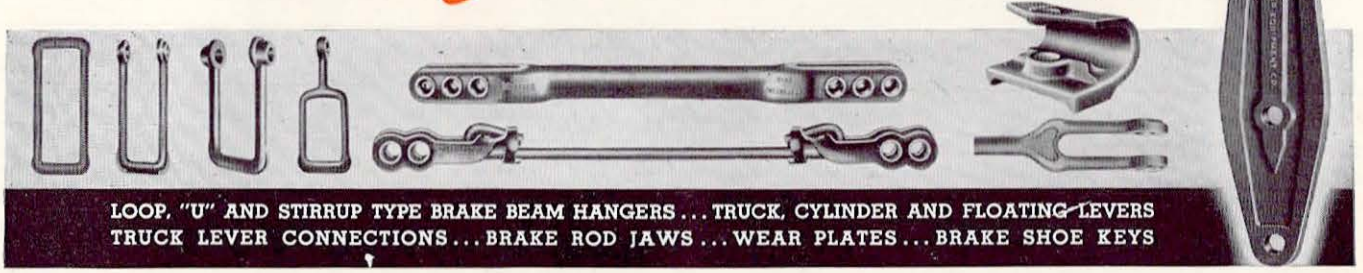
VEXING PROBLEMS

A TIMELY ANSWER TO SEVERAL

Maximum loading throws an added burden on brake equipment—a good reason why Schaefer connections through the bolster in combination with Schaefer loop hangers and truck levers should be used on all new freight cars. It's the modern way—to faster schedules, safer operation, and the conservation of both critical materials and manpower.

Schaefer EQUIPMENT COMPANY

KOPPERS BUILDING • PITTSBURGH, PA.



LOOP, "U" AND STIRRUP TYPE BRAKE BEAM HANGERS ... TRUCK, CYLINDER AND FLOATING LEVERS
TRUCK LEVER CONNECTIONS ... BRAKE ROD JAWS ... WEAR PLATES ... BRAKE SHOE KEYS

Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price $6.00 for one year U. S. and Canada. Single copies, 25 cents each. Vol. 114, No. 4.

Inland Reports on Its First Year at War

AMERICAN INDUSTRY is all-out for Victory—has performed production feats that would have seemed impossible before Pearl Harbor. But we all know that the *real* accomplishments—ones that make ours worthwhile—are those of our men on the fighting fronts.

It is therefore humbly, and with full realization of this, that we report on what we have done—putting every ounce of skill and energy into backing up the men who fight for us!

1942 OUTPUT AT 102% OF CAPACITY. Inland maintained its production of "fighting steel" at about 102% of rated capacity during 1942, despite lack of an adequate supply of suitable scrap and the loss of hundreds of skilled workmen entering the armed services.

BREAK OVER 50 PRODUCTION RECORDS. More than 50 Inland production records have fallen since Pearl Harbor!

★ Open Hearth steelmakers in March had their best month in history.

★ The Blast Furnace Department hit its all-time production peak in the month of December.

★ Near the end of July the 76-in. mill finished enough ship plate in one 24-hour period for the hulls of two Liberty ships. All our mills rolling ship plate turned out enough in July for 34 Liberty ships—nearly half the number sent down the ways that month.

★ —And so on in other departments throughout the mills. Inland steelmakers are determined that our fighting men will not suffer for lack of steel they can supply.

★ Inland mines and quarries produced far more iron ore, coal and limestone than ever before.

★ Lake freighters in the Inland fleet broke their own cargo records, not once but several times in 1942.

EXPAND AND MODERNIZE FACILITIES. Not only has top production of steel with installed facilities been maintained, but we completed 27 major expansion and modernization projects to get even greater tonnage.

★ Inland's new No. 6 blast furnace, first one built in the Chicago area since Pearl Harbor, was blown in Nov. 16 and now is pouring out 1200 tons of pig iron a day.

★ We soon will complete construction of and begin operating two more blast furnaces for the Defense Plant Corp.

★ A new electrolytic tin plate plant will soon be in operation to conserve our precious stock of tin.

★ New ore mining expansion assures a larger supply of iron ore.

HELP TRANSPORTATION OF WAR GOODS. Reduced customer unloading costs 75%—improved packaging saved 40% of space—increased weights of carloading 36%—lowered car detention time 20%.

GETS IN THE SCRAP. Inland contributed heavily to the American Industries scrap campaign, conducted its own extensive scrap advertising campaign, and Inland salesmen are participating actively in the steel companies' industrial scrap drive.

EMPLOYEES ALL-OUT FOR VICTORY. More than 2,500 Inland workers have entered the armed services.

★ If medals were awarded to workers in war industries for effort "above and beyond duty," many men at Inland would qualify to receive them.

★ Women are helping carry on at the plant, too—doing a variety of jobs in the mills to help relieve the manpower shortage and maintain capacity output of steel.

★ The entire Chicago Heights plant and many departments at Indiana Harbor already are over the top in the current drive to put 10% of total pay into war bonds.

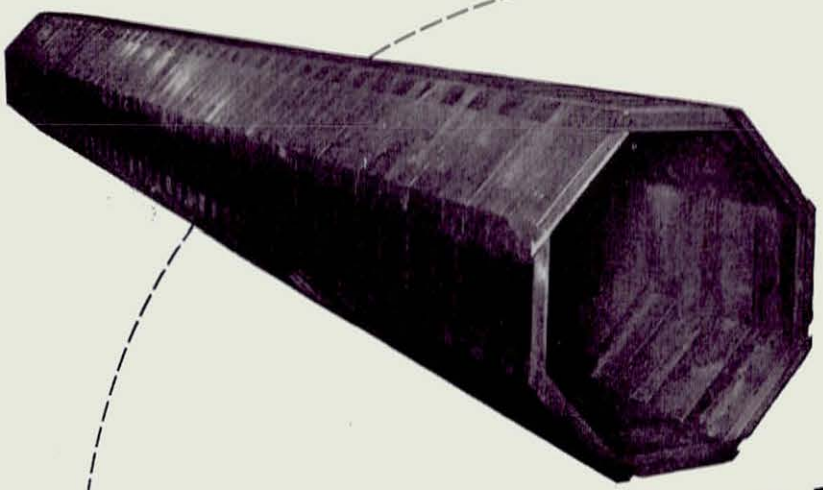
★ Inland girls have their own Red Cross group—making thousands of bandages. Nutrition groups are endeavoring to improve the general health of workers and fit them to contribute more to the war effort.

★ Many Inland employees are in the plants' own well-trained Catastrophe Organization, ready to meet any wartime emergency. Others are busy in civilian defense work, war group benefits, etc., and are sharing their cars, donating their blood and tightening their belts to do whatever else is necessary to win this war.

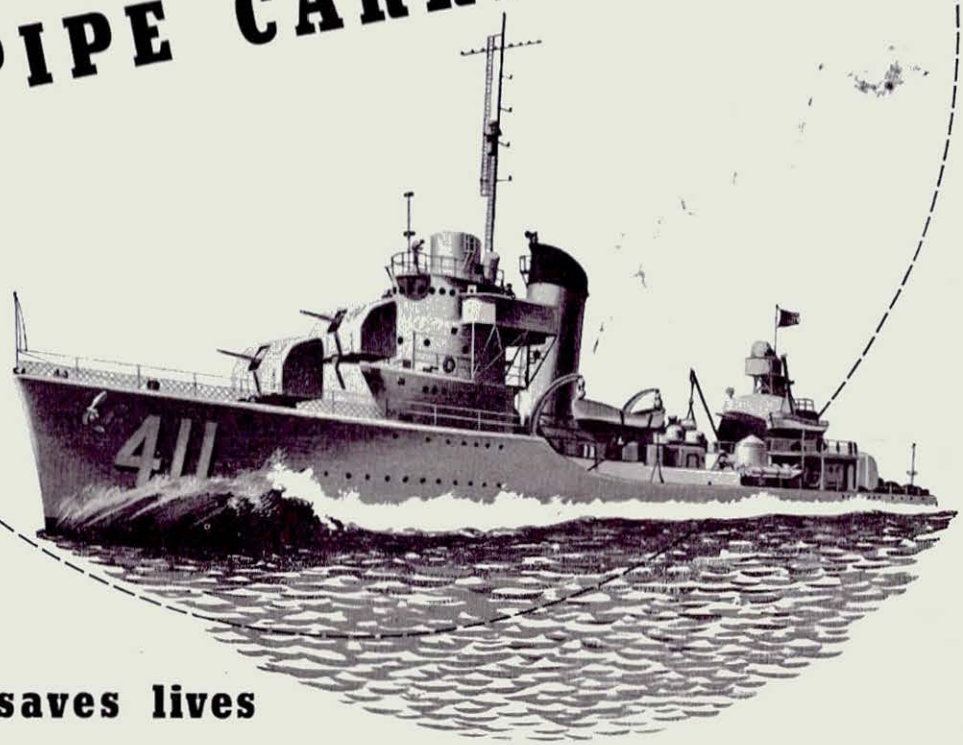
LOOKING AHEAD. As to the coming year, Inland and its men will continue to push the production of "fighting steel" at top speed. Rather than make predictions, we prefer to let production records speak for themselves. We know that we can pledge the whole-hearted support of every worker to all-out effort until Victory is won!

INLAND STEEL COMPANY

38 S. DEARBORN ST. • CHICAGO, ILL.



WOOD PIPE CARRIES ON



while steel saves lives

More and better equipment on the fighting front means a shorter war and fewer American lives lost. You can help by saving vital metal wherever possible.

One way is to substitute ARMCO Emergency Wood Pipe for drainage structures made of critical materials. This pipe requires no steel sheets and bands, wire mesh, metal reinforcing or other front line munitions. It is easy to handle and has ample strength to meet railway standards. When the emergency is over, a corrugated metal pipe may easily be threaded through or jacked around the wood structure.

ARMCO Corrugated Metal Pipe is only on temporary "leave of absence." It will be back after the war with its flexible strength, long lengths, tight joints and low installation costs.

Meanwhile, steel must not be used in any drainage structure unless engineering integrity demands it. Remember it's not just pounds of metal you are saving—it represents ships, tanks, guns and bullets delivered to our fighting fronts. As desirable as the steel product is, you'll find ARMCO Emergency Wood Pipe a mighty practical substitute. Write for complete data. Armco Railroad Sales Co. Incorporated, 151 Curtis St., Middletown, O.

ARMCO ARMCO **EMERGENCY PIPE**

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INLAND STEEL COMPANY

38 S. DEARBORN ST. • CHICAGO, ILL.

3-WAY HELP FROM STURTEVANT

TO SIMPLIFY WINTER CARE OF AIR CONDITIONING

EMERGENCY EQUIPMENT REPAIRS

Sturtevant is ready to make repairs on air conditioning equipment which you are unable to service in your own shop. Fans, coils or complete units will be put back into first class condition—within existing limitations on the use of new materials. Our Railway Air Conditioning Engineers are on call to advise you about the best methods of handling such work.

HELP FOR UNTRAINED MEN

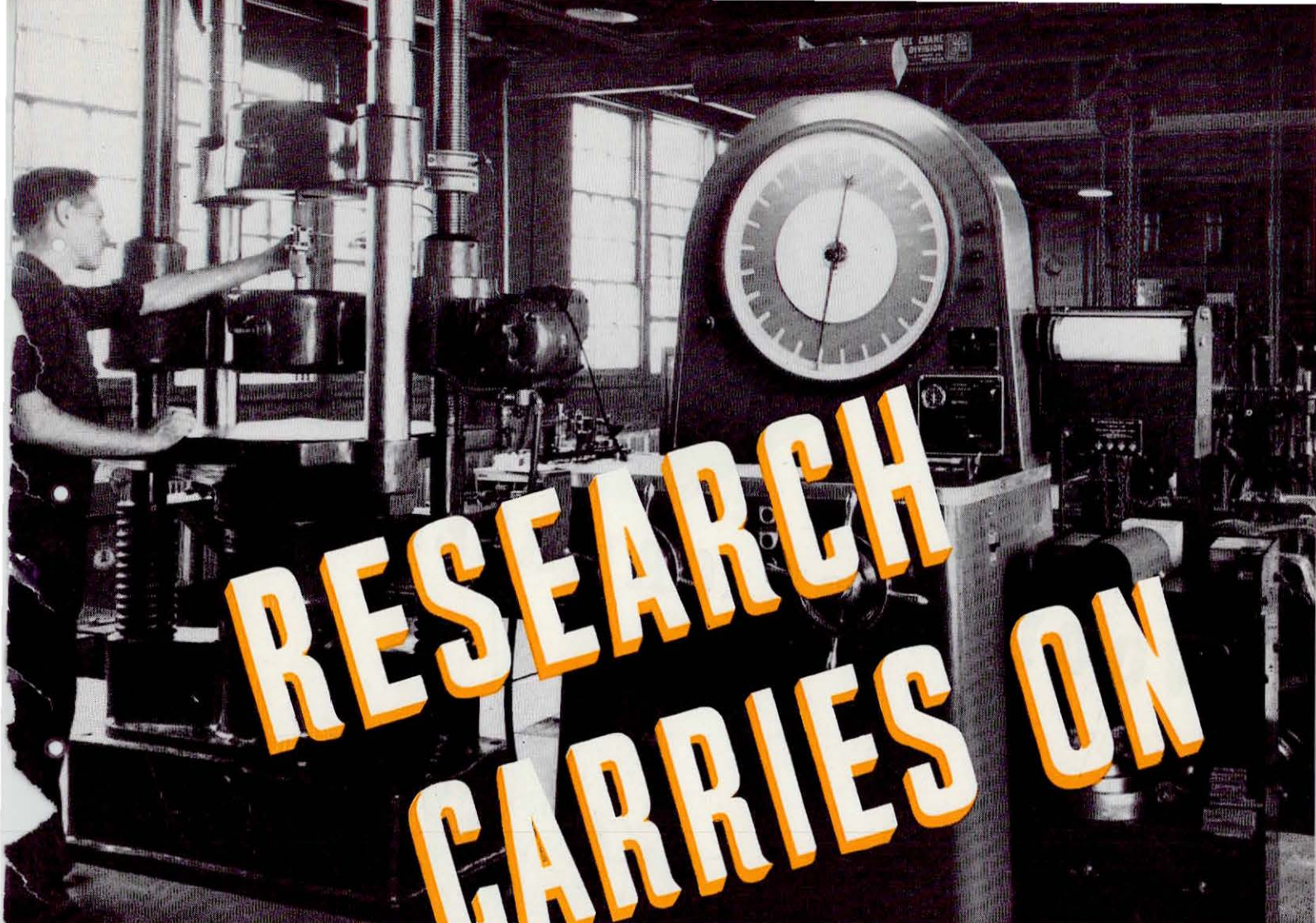
Sturtevant has prepared this handy Service Tag to see that every air conditioning unit is properly and promptly cared for. One of them tied to each unit will remind service men of all winter precautions as well as regular inspections. Its use will simplify training procedure and help you guard against emergencies and major repairs.

GENERAL WARTIME SERVICING CHECK

Sturtevant has prepared this simplified Maintenance Guide for hanging on your service shop walls. It lists the most vulnerable parts of Mechanical and Ice Systems, and the most efficient, time-saving methods of servicing. Its use will help you prolong the life of valuable equipment and keep air conditioned cars on the job for the duration.

★ Make sure your men use the Sturtevant Equipment Tags and Wall Charts shown above. A supply of both has been sent to the Engineer in charge of Air Conditioning for your Railroad. Additional copies gladly sent on request to: *Railway Air Conditioning Division,* B. F. Sturtevant Company, Hyde Park, Boston, Mass.

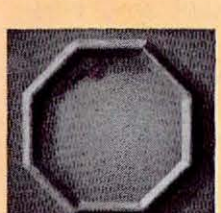
Sturtevant
REG. U. S. PAT. OFF.
Puts Air to Work



RESEARCH CARRIES ON

TODAY our many plants are busily engaged with production of steel castings, forgings and springs for the use of our fighting forces.

In this effort, our laboratories and research facilities are playing a most important part in the development of better compositions for cast armor.

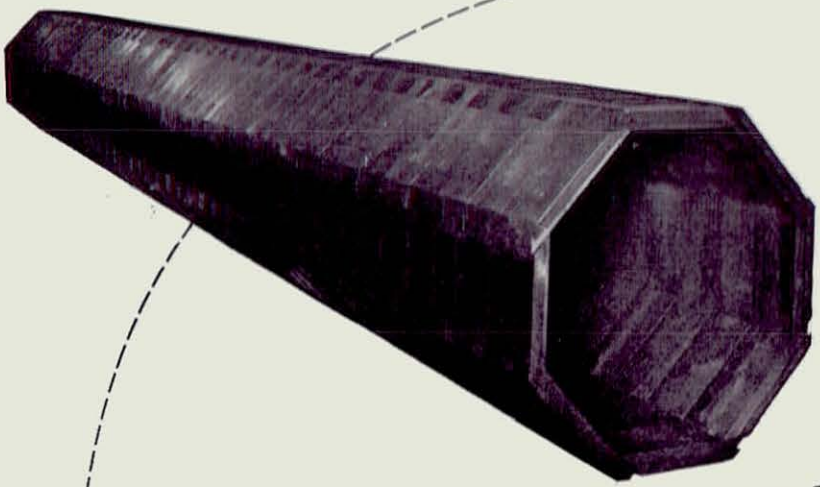


The octagon . . . a trade mark of good steel castings.

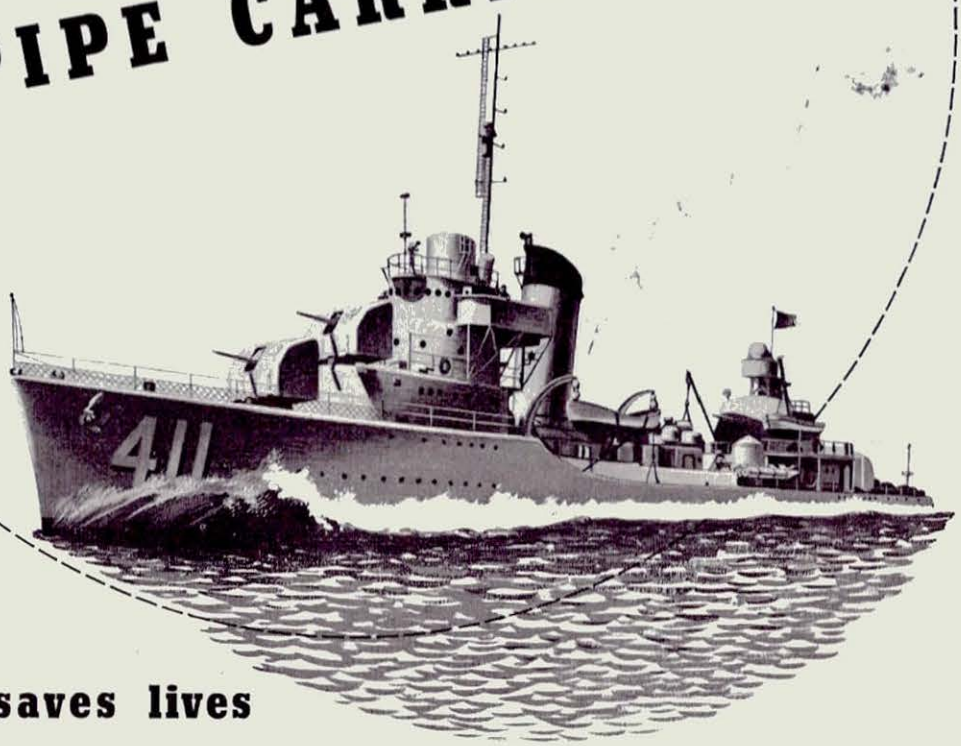
And yet . . . research in the railway field carries on. This research will be reflected . . . in improved A. S. F. products for freight cars and locomotives . . . in better clasp brakes for finer, faster equipment . . . in steel castings that will stand the tough tests of tomorrow.

AMERICAN STEEL FOUNDRIES

Chicago



WOOD PIPE CARRIES ON



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ARMCO ARMCO **EMERGENCY PIPE**

SCOTCH BOILERS CLEARED FOR BRITAIN

A Scotch boiler is built for marine service only.

Being Scotch, it makes steam economically.

But, being no landlubber, it isn't worth much until it has gone to sea. And the bigger the boiler the less its land value.

An Eastern boilermaker turned out ninety Scotch whoppers. All ninety boilers had to be hurried 283 miles to a shipyard, for installation in ships badly needed by embattled Britain.

Only fifteen railroad miles from the boiler works, wrecking cranes could load the boilers on barges for movement by water to the shipyard—if time and expense permitted.

A railroad man suggested that he might, together with other roads, figure out an all-rail route to the shipyard. "The boilers first have to be loaded on flat cars anyway," he hinted.

A survey was started. Immediately the well-known "Clearance Diagram" bobbed into the problem, ruling that no carload more than eleven feet, six inches wide and fifteen feet high could roll on the tracks along the most direct route.

Each Scotch boiler, lying sidewise on a "depressed well" flat car at the boiler works, was twelve feet, six inches wide and soared seventeen feet, seven inches above the track rails.

But the railroad man took over the job of moving these oversized Scotch boilers, and told the shipper not to worry. He and brother railroaders raised one overhead trestle six inches, laid a gantlet track on a through truss bridge, and raised a track four inches on a half-through bridge.

The team of railroaders also cut off some rock ledges which hung too close to the roadbed in places, removed a few waterspouts and dwarf switch targets, shifted parts of the roadbed eight feet away from a mountain, dug up three "well" cars—and transported three boilers at a time on a roundabout route 381 instead of 283 miles between boilermaker and shipyard.

Incidentally, the seven railroad systems joining in this weird freight movement sidestepped some tunnels, annulled some traffic on parallel foreign single track, ran the swinging boilers at low speed past scant clearances, and merely scraped bits of roof off a way station. But they delivered the boilers to the shipyard in much less time—and for much less money—than was possible by a water route.

And what I like about this freight-hustling episode is that the shipper dealt with only one railroad agent. The other railroaders merely teamed up with him —to see that those Scotch boilers were cleared for Britain.

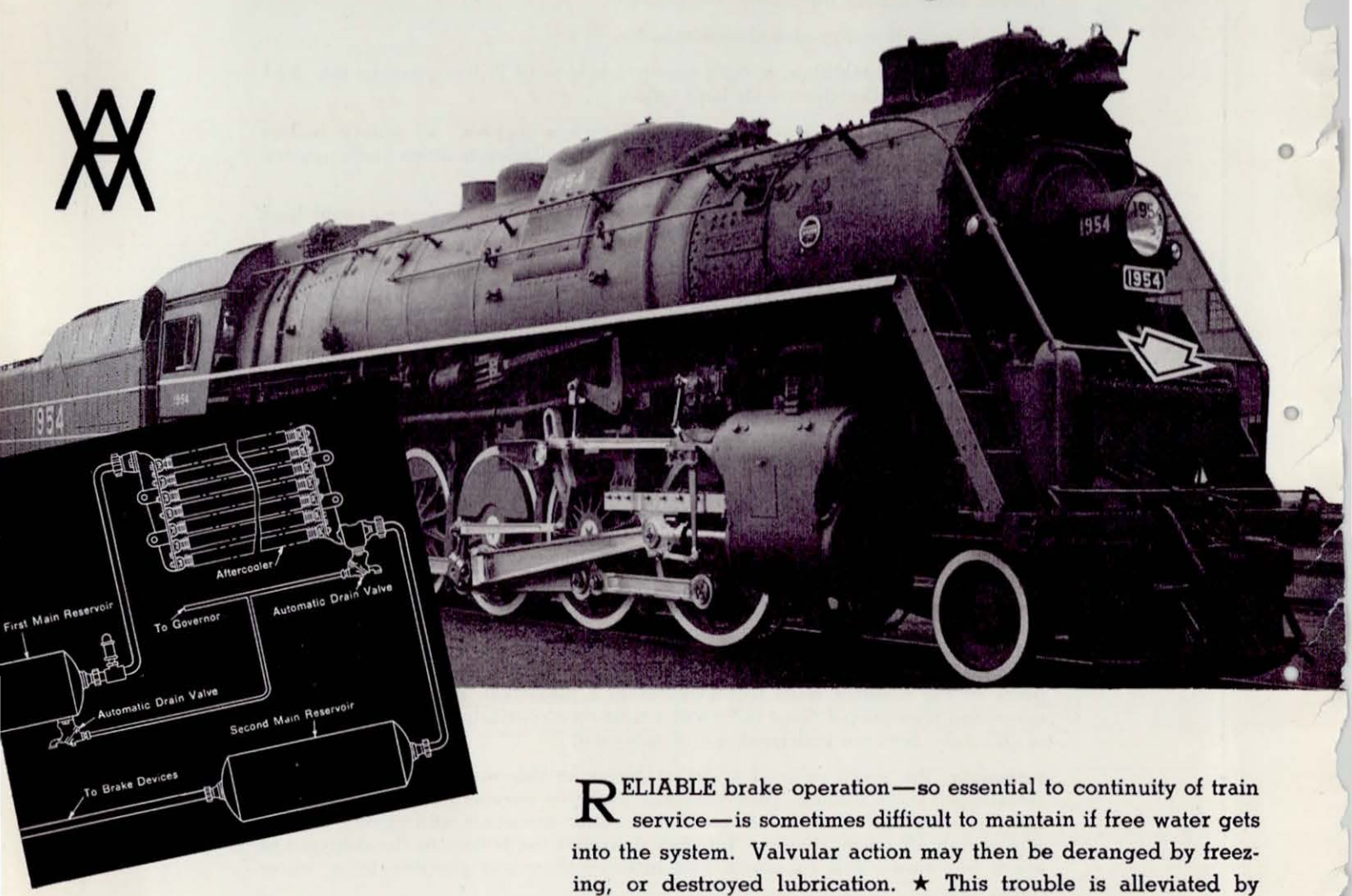
Sure, lots of other railroaders are doing jobs of this kind, but somehow you almost never hear of them. More's the pity.

—*The Trackwalker*

AMERICAN LOCOMOTIVE • GENERAL ELECTRIC

113-3-9500

DRY AIR is a Help in *Maintaining* *Satisfactory* BRAKE PERFORMANCE ... achieved with the *Aftercooler*



In charging trains from yard air supply, be sure to blow water from line before connecting to brake pipe.

At regular intervals drain accumulated moisture from main reservoir, filters, and dirt collectors to prevent its reabsorption into the system.

Do not let gummy dirt accumulate on conventional radiating pipe to reduce its normal cooling effect, and be sure no obstruction prevents free circulation of air around coils.

RELIABLE brake operation—so essential to continuity of train service—is sometimes difficult to maintain if free water gets into the system. Valvular action may then be deranged by freezing, or destroyed lubrication. ★ This trouble is alleviated by our radiator type Aftercooler having automatic drain valve—a compact arrangement of parallel finned tubes that can readily be located in the path of natural air currents. It produces a far better cooling effect than the conventional type of radiating pipe, and automatically ejects precipitated moisture every time the compressor governor operates. ★ On hundreds of locomotives, the Aftercooler is demonstrating its merits as an effective means to assure dry air for the brake system. It promises distinct advantages for YOUR new motive power also . . . In the meantime . . .

These suggestions may be helpful.

WESTINGHOUSE AIR BRAKE CO.

WILMERDING, PENNSYLVANIA

Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name registered U. S. Patent Office.

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The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service

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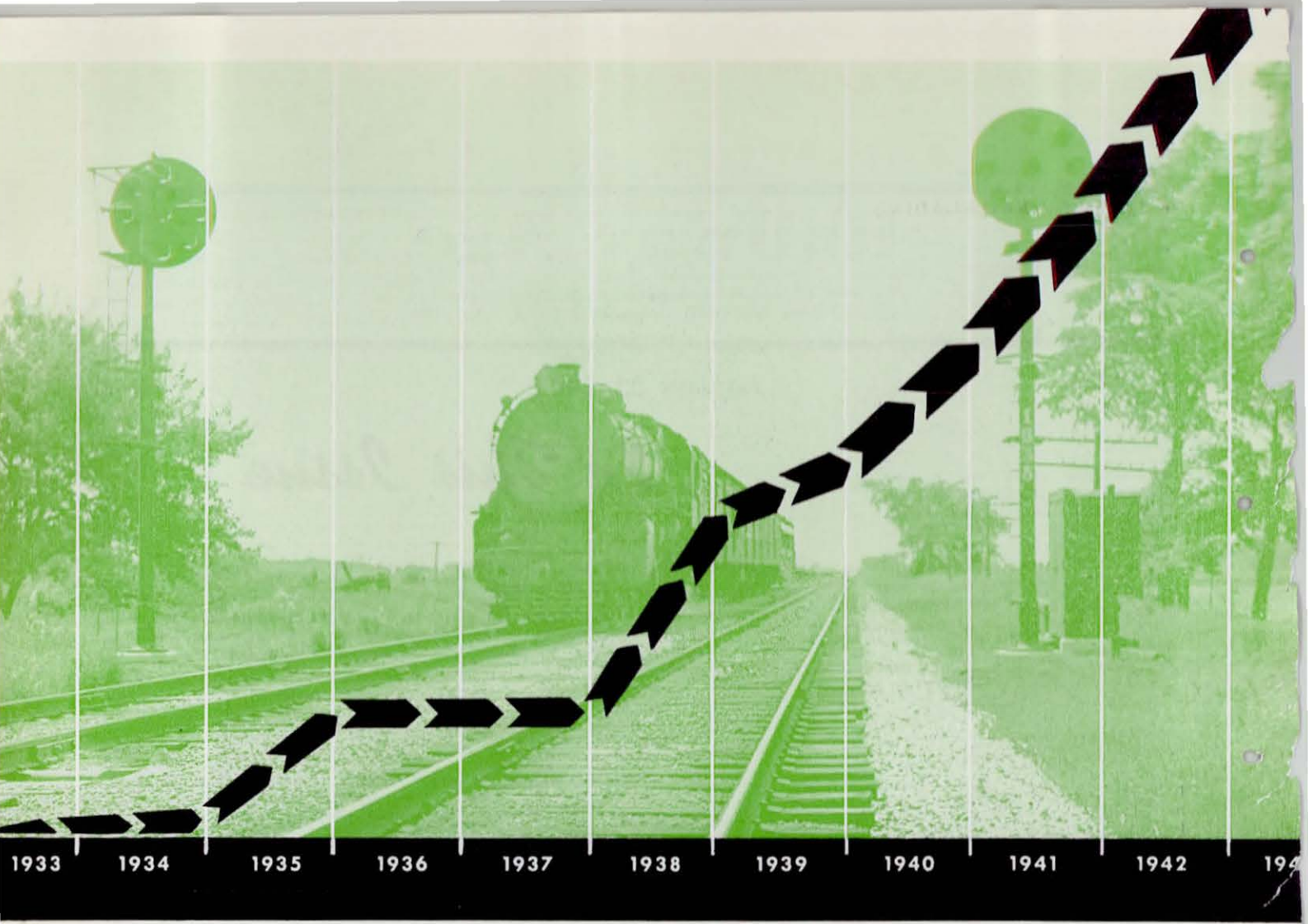
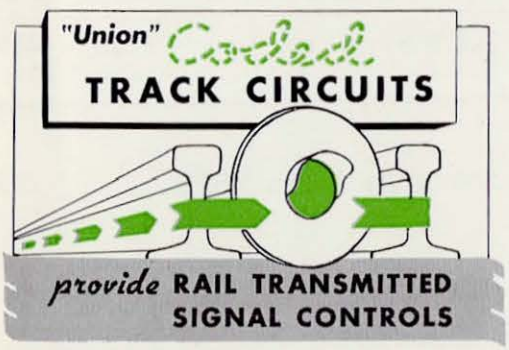


The TREND

toward "Union" Coded Track Circuits!



Coded Track Circuits, pioneered and perfected by this company, are in service on approximately 3500 track miles of United States railroads.

WIDESPREAD recognition of their inherent advantages is confirmed by the record of installations of "Union" Coded Track Circuits. The reasons are many:

1. They improve the safety, reliability and performance of every signal system in which they are employed.
2. They may be used with engineering and economic advantage not only in the design of new or original installations but also in the rehabilitation of older installations to meet modern requirements.
3. They are suitable for resignaling programs, extending over a period of years, because installations may be made progressively by completing different sections in the order of their current importance.
4. In addition to their use in complete signal systems, they may be installed as individual circuits for special purposes.
5. Coded Track Circuits require smaller amounts of copper and other restricted materials than any other form of signal control.

UNION SWITCH & SIGNAL COMPANY

SWISSVALE, PA.

NEW YORK · CHICAGO · ST. LOUIS · SAN FRANCISCO

The Week at a Glance

36 YEARS OF RAILROADING: The things that are happening to the railroads now—and those that threaten—are seen in a somewhat different light, depending on whether they are looked at by themselves, or in contrast with other periods of crisis. Believing that experience of earlier times of stress yields some interesting, and quite likely helpful, lessons for present application, the editor of this paper devotes the editorial comment section herein to reviewing such of these periods as fall within the years which he has devoted to editorial work in this industry. The most notable change which has occurred is the disappearance of virulent anti-railroad feeling on the part of the public—the absence of which many now seem to take for granted.

●

DIFFICULTIES NOW VS. 1906: Without minimizing present railway difficulties, our editor in the comparison of his earliest years of service with his latest, concludes that problems of that period were, probably, just as difficult as those of today. Because, then, while earnings were better, public and customer opinion of the railways was unbelievably bad. Now, while political threats to earning power are immensely greater and more immediate, public opinion has vastly improved. One thing though—improvement in this or any other industry cannot continue unless there are voices able and willing frankly to discuss its problems, and disseminating means for solving them.

●

A REAL "FORGOTTEN MAN": Back in 1906 James J. Hill took a pessimistic view of the outlook for the railways, because of government policy toward them—and yet, at that time, the industry was earning a higher rate of return than it has ever earned since. Comparing 1942 with 1906, the industry had doubled its investment, trebled its service to the public, quadrupled the average wages of employees, increased its tax payments 17-fold—but it had not even doubled net earnings available for investors. The enormous improvement in its operations effected by this industry over a period of three and a half decades has been reserved exclusively to the public and to employees—none of the fruits of improved plant and methods has been passed along to the proprietors, who, indeed, are less well off now than they were in the early years of the century.

●

TRAFFIC WILL KEEP ON UP: There has been considerable talk of late to the effect that the war traffic peak has been reached and that movement has now hit a plateau (limiting factors of labor and scarce materials holding over-all production at its present level). Mr. Eastman does not share this opinion. Speaking to the Associated Traffic Clubs in St. Louis this week (as reported herein), the ODT Director said he *knows* the peak in passenger traffic hasn't been reached and he doesn't think it has been in freight traffic either. He suggested a number of expedients whereby larger traffic may be handled—among them that the unions "relieve manpower and operating conditions by further changes in working rules." He is especially concerned regarding prospective traffic increases in the Pacific Coast area, where railroads were not designed for such heavy loads as are in prospect.

●

SENATORS' KIND WORDS: Senator Mead of New York last week paid a high compliment to the railroads and their employees for their handling of oil—in connection with a Truman committee report on barging this traffic—and Senator Truman concurred in the expression. It is to be hoped that these gentlemen, and their colleagues in both houses, will recall these gracious sentiments, so well deserved, when after the war, proposals are broached to use billions of government money to divert railway traffic to the highways and the air. The railroads have provided their war-time service from capital expenditures *made in the Twenties.* Another decade of New Deal starvation, such as the Thirties, and they would not be able to repeat what they are now doing.

●

WORKING CONDITIONS: The Supreme Court has decided that, although the Federal Government has "occupied the field" of labor relations and working conditions on the railroads, it has not thereby (as is usually the case) eased the states out of this area. The states can still enact and enforce legislation and regulatory orders bearing on railway working conditions on specific questions not regulated by federal authority. Seemingly another instance of the "dual basis"—the employee gets the benefit of the rulings of both state and federal authority, "whichever exceeds." This case is reviewed in the news pages herein.

●

PLYWOOD REEFERS: Advantages of plywood in refrigerator car construction include: Low conductivity, minimum of joints (hence few or none of them unsupported) assuring dry insulation, reduction in pieces (hence fewer nails and screws, greater strength, less labor time), saving in dead weight, ease in the elimination of cinder leakage. The use of this material for this purpose is discussed by an expert in an article herein—who emphasizes that success depends on choosing the right type of plywood for the job. He describes the different types of this material and their characteristics.

●

CTC EXPEDITES COAL: How c.t.c. is expediting coal movement on 59 miles of single track on the Virginian—with a total of 25 to 30 train movements a day, the bulk of them coal trains or empties—is described in an illustrated article. An operating officer, who doesn't have any c.t.c. in his district, tells us he wishes he did have—because of the resultant economy in the use of telegraph operators, competent help in which category is a pretty scarce article at the present time.

OPTIMISTIC AIR MAGNATE: It has been rather the fashion of late to deprecate the amount of freight traffic the air lines are likely to take away from the railroads, but a speech by an air transport executive, reported in the news pages herein (from the Congressional Record) supports a rather more confident view. This man expects the air lines to divert enough express and freight away from the railroads to keep 25,000 to 30,000 planes in the air—and this does not include all the first class mail and practically all the passenger business, of which burden he also expects to relieve the railroads. This tapping of the railroads' arteries is to be quite painless and even harmless, according to this witness, "because it will be a gradual process." Starvation, according to this novel logic, is pleasurable and beneficial—provided it is long drawn-out.

●

STAND-BY STATUS FOR RRS: This aviation executive's outlook, of course, is quite selfless. The result of these inroads by planes into railroad traffic will be, he says, to "provide a powerful bulwark for our national defense by constantly maintaining a reservoir of aircraft and trained personnel for any future emergency." If this "reservoir" is to be *used* in such an emergency, however, the railroads will have to have the capacity at that time to take back from the air lines the traffic the air lines now propose to divert from them. What are the railroads going to use for money to maintain this stand-by capacity, unless they are in the meantime permitted to share in the revenues which this traffic will yield?

●

WAGE CONFERENCE: Mediation has ended without results on the non-ops' wage increase and closed shop demands, and interested parties are now marking time to see whether the case will go to an "emergency board," or whether the War Labor Board will assume jurisdiction under the anti-inflation act. The Attorney General has given an opinion that no agreement forced upon the railroads to establish the closed shop could be binding, because the law expressly forbids them to "influence or coerce" employees in any way to induce their membership in a labor organization.

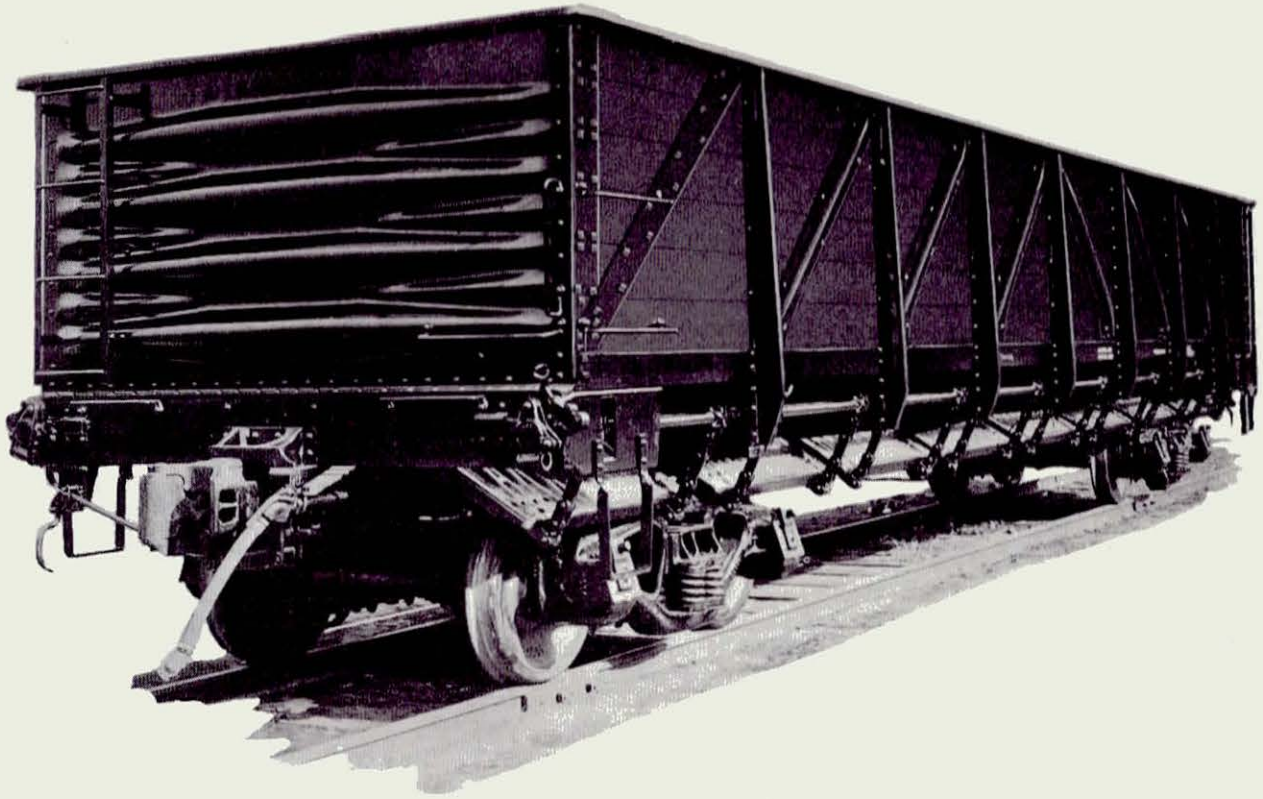
●

SCRAP AND SCHOOLING: The Army got some first-hand experience in blowing up 372,000 lb. of bridge, and the war program acquired that weight in scrap, when an L. & N. bridge across the Kentucky river was immolated to the war program, as described in this issue.

●

IN WESTERN CANADA: How the western lines of the Canadian National have stepped up their operations to meet the demands of war traffic is the subject of an illustrated description, prepared by our transportation editor from first-hand observation. Military camps and construction projects in the area have not only increased traffic but have greatly altered the lines of intensive movement.

DREADNAUGHT ENDS



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RAILWAY AGE

Thirty-Six Years on Railway Age

By the Editor

This week the writer completes thirty-six years' service as consecutively associate editor, managing editor and editor of *Railway Age*, and as head of the company that issues it and other publications.

When this service began most conditions in the railway field were widely different—but, significantly, not all of them. Thirty-six years ago, as now, the nation had full employment and the railways had a manpower shortage; and the railways had—or thought they had—a much greater shortage of facilities than they now fear that they may have. This in spite of the facts that they then had more employees, locomotives and cars than now with which to handle a much smaller traffic. Comparisons—and contrasts—between railway conditions and problems then and now, and review of the long series of developments that have changed them, may not only be interesting at the present time, but seem well worth making because of the light they may throw on present and prospective problems.

James J. Hill on the Situation

In 1906 railway freight traffic was 216 billion ton-miles, or one-third as large as in 1942. Passenger traffic was 25 billion passenger-miles, or half as large. There were 1,521,000 employees, or 230,000 more than in 1942; 51,672 locomotives, or 10,227 more; 1,837,914 freight cars, or 122,000 more; and 42,262 passenger-train cars, or 4,400 more. And yet at that time the *Railway Age* was replete with references to the severe congestions of traffic and shortage of cars prevailing, and with discussions of proposed legislation and other action to remedy the situation—including adoption of government ownership.

There was quoted an open letter by James J. Hill to the governor of Minnesota showing that in the preceding decade ton-miles had increased 118 per cent and passenger-miles 95 per cent, as compared with mileage, 21 per cent; locomotives, 35 per cent; passenger cars, 23 per cent; and freight cars, 45 per cent. "The investor," said Mr. Hill, "declines to put his money into enterprises under ban of unpopularity, and even threatened by individuals and political parties with confiscation or transfer to the state."

Development Intensive Since 1906

Actually, the railway industry was earning a larger percentage of return then than it ever has since; and its total investment had increased $2,900 million, or 30 per cent, during the preceding decade. But the investment had been made largely for *extensive* development, as indicated by Mr. Hill's figure showing an increase in *miles of line* of 21 per cent. With almost no increase in investment or equipment, and principally because of *intensive* development before the depression, the railways succeeded in 1942 in handling a traffic which in *three years* had increased 90 per cent in ton-miles and 135 per cent in passenger-miles.

Quotation of the references to the "ban of unpopularity" and to threats of "confiscation or transfer to the state," made in his letter by Mr. Hill, one of the outstanding railway leaders of all time, makes a good start in a review of the later ups and downs of the industry. In 1942, as compared with 1906, it had (1) more than doubled its investment; (2) trebled its service in handling traffic; (3) quadrupled the average annual pay of its employees (from $592 to $2,286); (4) trebled its operating expenses; (5) had its taxes increased 1,725 per cent; but (6) had not doubled its net operating income or its net income available for dividends and improvements.

Investors Fared Better Then

In the ten years ending with 1906—during which it was recovering from the depression of the Nineties—it earned an average of 4.83 per cent on investment; and its net operating income of $720 million in 1906 yielded a return of 5.8 per cent. In the ten years ending with 1942 it earned an average of only 2.56 per cent on investment; and its record net operating income of $1,390 million in 1942 yielded a return of only 5.23 per cent.

The thirty-six years of railway history since 1906

happen to divide neatly into three twelve-year periods, each of which had very distinctive characteristics.

Because of financial abuses, rebating, political activities, shortage of cars and a terrible accident record, the railways entered this period probably the most unpopular industry that ever existed. They had hardly a friend outside of Wall Street and their own offices. Farmers and business men were their bitterest enemies.

The Hepburn act giving the Interstate Commerce Commission real power to reduce rates and abolishing free passes was just going into effect. The universal public clamor caused passage of literally thousands of state laws to reduce rates and regulate almost every detail of management and operation. A Chicago newspaper published an editorial denouncing the railway accident record under the heading, "Miscreants and Murderers." When, because of increasing costs, the railways tried to make a 10 per cent advance in freight rates, shippers got passed the Mann-Elkins Act of 1910 empowering the Commission to prevent advances.

The Commission refused any increase; and in five years the railroad bankruptcy record was broken. Government ownership was advocated by business men, farmers and many newspapers. When the Bureau of Railway Economics was established it was promptly blacklisted by the national association of the large newspapers as a "free publicity organization"; and it had to make an arrangement with *Railway Age* to get material prepared by it through to the press.

Public Relations, "Safety First", and Government Operation

The Bureau's establishment in 1910 was a significant reflex of public sentiment, because it was the first effort begun by the railways, individually or collectively, to carry on what is now called "public relations work." They were still more prosperous than they ever have been since; but management was awakening to a realization that there was no future for private ownership under a public sentiment so hostile.

Simultaneously with the beginning of organized public relations activities, there was started another movement that was to prove of utmost importance. In August, 1910, the writer attended at Baraboo, Wis., a meeting at which there was formed on the North Western the first railway "safety first" committee composed of officers and employees. He was so impressed with this method of attacking the terrible accident problem that the *Railway Age* immediately started a campaign that spread it throughout the country. The reduction of accidents then begun has been one of the greatest achievements of the railways, not only from a humanitarian standpoint, but as a contribution to improvement in public sentiment toward the industry.

The adoption of government operation in 1918 was generally accepted by railway officers as the deathknell of private ownership. On the contrary, it probably saved it. For government operation soon substituted its own unpopularity for that of private management. In this process the staff of *Railway Age* energetically assisted, both in and outside of its columns, when other railway spokesmen were gagged, and in spite of constant pressure from and many clashes with the Railroad Administration.

1919-1930, Inclusive

There was a great public relations and legislative battle fought in 1919 to secure passage of the Transportation Act of 1920 under which the railways were returned to private operation. It was the most constructive transportation legislation ever passed; and it was essential. Under government operation the margin between earnings and expenses had been so reduced that, without advances of rates, reductions of unit costs, or both, no possible increase in efficiency and economy could have saved the railroad industry from general bankruptcy.

Trying to Earn a Living in the '20's

After large advances of wages by the new Railroad Labor Board and of rates by the Commission in 1920, there began a long struggle to maintain gross earnings enough and curtail operating expenses enough to earn the 5¾ per cent to which the Commission held in 1922 that the industry was entitled under the Transportation Act. A large increase in public relations activities by the railways, both individually and collectively, which the *Railway Age* led in promoting; battles with shippers over rates; battles with labor unions over the "national agreements" made with them by the Railroad Administration and over wages; and great increases in efficiency of operation, were necessary. Two constructive policies adopted by the railway executives in 1923 turned the tide. They were, first, that of making the largest investment practicable to expand and improve facilities; second, that of promoting organization of co-operating regional shippers' boards.

The Era of Subsidized Rivalry

The great increase in government-subsidized and unregulated competition by other carriers was occurring; and the return of 5¾ per cent never was earned. But enough was earned to make possible an increase of $7,524 million in investment in the decade ending with 1929. Most former abuses in the industry had been abolished. Car shortages were terminated. Accidents were phenomenally reduced. Nationwide cooperation and understanding were achieved with the shipping public.

The railways became, by comparison, such a popular

industry that the previous universal hatred of them was forgotten by almost everybody excepting those who had had to battle for them in the forum of public opinion.

1931-1942, Inclusive

Depression, aided by increasing government-subsidized and unregulated competition by other carriers, swiftly reduced the railway industry during this period to virtual bankruptcy. The labor unions agreed in January, 1932, to a 10 per cent temporary reduction of wages. Business began improving in the last third of 1932. But early in 1933 came the banking crisis, followed immediately by the New Deal, which included for the railways creation of the office of co-ordinator of transportation and restoration of wages.

The American Railway Association and Association of Railway Executives were soon afterward consolidated in the Association of American Railways with more power and new leadership. By the new leadership a large public relations and advertising program of "complaining" less and talking of railway achievements relatively more was adopted. The first advertisement was headed, "We're Doin' O. K., Buddy," when net operating income was only half as large as in 1929. Great improvements by individual railways in both their passenger and freight service were made. But there was no increase in investment. It was actually $450 million less at the end of 1940 than at the end of 1931, retirements of property having exceeded installations. The railways rightfully acclaimed their achievements—but these persistently failed to include net earnings. Traffic increased too little, and wages, under labor union and government pressure, too much. Net operating income in 1940 was still only half as large as in 1929—and actually less than in 1906. The railways sought helpful legislation, especially as regards competition, with the supposed backing of the administration; but this dwindled to little in the Transportation Act of 1940.

The Administration Is Not Grateful

Then came huge expenditures for war, and entirely unprecedented increases of traffic. Predictions were made by government spokesmen that the railways would be unable to handle the traffic expected. Traffic increased far more than almost any forecast anticipated. The railways were denied equipment and materials that they ordered and upon which they relied. Thus far they have handled the traffic, anyway. They have handled it with the investment made in the period ending with 1930, with the co-operation of shippers established during that period, and with improvements in operating methods made throughout the last two decades of both prosperity and adversity.

The railways, as well as most industries, have rendered the greatest service to the present federal administration ever rendered to any administration in history, and have been treated the worst by it. Largely because of increased costs forced on them by government, their net operating income, including the record amount earned in 1942, has been only two-thirds as much during the last decade as during the preceding decade; and yet O. P. A., a branch of the administration, is seeking reductions of rates held reasonable by the Interstate Commerce Commission upon the grounds that they are inflationary and that the railroads are earning too much.

Criticism Now Deemed Impolitic

Under previous administrations in Washington few spokesmen of the railways, including executives of individual lines, hesitated to criticize government policies, either already adopted or proposed, that they considered unfair and harmful. But even before the war many railroad officers were beginning to show they believed it better to try to appease this administration than to risk appealing from it to public opinion.

An illustration of this growing tendency is the lack of outspoken aggressiveness shown by those representing the railways in making demands and putting pressure upon the War Production Board for needed equipment and materials. The future of the railways is being jeopardized more by their failure to get adequate equipment and materials than by any other cause since the last World War; but the government's Director of Defense Transportation has been more outspoken in emphasizing their needs than their own association.

Who Opposes Socialized Railways?

The President on November 5 sent a letter to Congress transmitting a report on transportation prepared for his National Resources Planning Board which adroitly promoted government ownership, and was widely quoted in the press. As far as we know, there has been no public comment on this report in the almost three months since by any person or agency representing or associated with the railway industry excepting *Railway Age*.

Such developments, in contrast with those under any previous administrations, are of great significance. The writer has known a half dozen generations of railway executives. The present generation has demonstrated, under the most crucial testing, as much ability as its predecessors. It has, individually and collectively, as much courage. But the present administration in Washington has succeeded in making itself feared by business leaders as no preceding administration ever did. And now that the nation is at war, there is added fear of having criticisms of administration policies stigma-

tized as "unpatriotic" even when the criticisms are based upon the probable effects of these policies on the war effort and on the railways and other industries in the post-war period.

Appeasement or Frank Discussion?

The relations between a government and its people have become very undemocratic, very bad and very dangerous when so many leaders in affairs have become fearful that the government will make reprisals for criticism of it. In all history, excepting under dictatorship, there has been only one remedy for such a situation—viz., more criticism of government by those who have the courage to make it.

Throughout the long time the writer has been connected with *Railway Age* this paper has promoted and fought for what it has believed would best enable the railway industry to serve the public economically and efficiently. It has devoted most of its space to promoting technological progress in the industry. It has attacked rebating, graft and reciprocal buying. It took up the "safety first" movement started on the Northwestern in 1910 and spread it throughout the nation. It has disseminated more information and arguments against government ownership than any other agency. It was in constant trouble with the Railroad Administration in 1918 because of attacks on policies plainly intended to perpetuate government operation. It has attacked "featherbed" rules and opposed advances in wages that it has considered unwarranted. It has fought for adequate rates and a fair return on investment; answered shipper propaganda against the railways; and, beginning in 1923, vigorously promoted co-operation between shippers and railways through the shippers' boards. It has constantly agitated for adequate equipment and materials for the railways during the present war period. During the last third of a century it has repeatedly lost circulation and advertising because of its editorial policies. It has had the leaders of the railway labor unions seriously propose that railway executives should *boycott its advertisers* to force changes in its editorial policies.

Conditions have changed. Government has changed more. Railway problems are different—may be in future not only different, but more difficult than ever. But probably they were as difficult thirty-six years ago as now. For then, although the railways had good earnings, they had the most venomous and dangerous public sentiment that ever confronted an industry. You could hardly defend them in a public address without being insulted from the audience and risking being thrown out. Twenty years ago the president of a state agricultural college was discharged for having the writer make an address on freight rates to a large meeting of farmers.

The Contribution of Railway Age

Meantime, *Railway Age* has had the satisfaction of having been the most-quoted business paper in the world, and of having established the reputation of contributing more to the welfare of the industry with which it is associated than any other publication ever contributed toward the welfare of any other industry. It will contribute its share in future unless continuance of the amazing trend in this country within recent years toward totalitarian government forces complete substitution of efforts to appease those in power for honest and frank discussion of government policies and national problems in the public forum.

When appeasement of government has to be substituted for forthright public discussion, there is soon left so little real democracy, and so little real private enterprise in any industry, that much more than public discussion is needed to revive them.

Believers in Freedom Can Plan Too

"The retention of democracy requires the exercise of its functions. As an athlete becomes soft and flabby where his muscles are disused, so does the spirit of democracy where it is not practiced. Give us a few more years of the political pap-sucking which has bought us and paid for us in the past, a few more years of the mess-of-pottage form of government, and we will be fair spoil for the two-penny American Hitler whom the future will surely bring, the planner who plans our democratic privileges into oblivion. Let those of us who love democracy do a little planning too."—Governor Dixon of Alabama in an Address to the New York Southern Society.

The Quota System of Wheat Marketing Has Eliminated the Annual Grain Rush

Canadian National Western Lines Carry On During War Years

Operating conditions and problems have changed materially since September, 1939

MORE than three years of wartime transportation problems have brought numerous changes in operations on the Western Region of the Canadian National. Traffic on these lines normally consists primarily of raw materials but the location of many military encampments and war production plants in western Canada and the increase in traffic for Alaska have changed materially the character of the traffic.

The Canadian National's Western Region began to feel the impact of wartime traffic much earlier than the lines in the United States. The pre-war year of 1938 had been a good year from a traffic standpoint, particularly as to wheat movement, and increases in traffic of 36.8 and 39.7 per cent respectively over the previous year were shown during the months of September and October. September, 1939, the first war month, showed a still further increase of 30.1 per cent in traffic over the same month in 1938 and, despite the fact that October, 1939, showed a 22 per cent decrease because of the application of the quota system on wheat shipments, the year 1939 showed an increase of 12 per cent over the previous year. This was increased 9.4 per cent further in 1940, and 1941 showed still further increase of 16.6 per cent. The year 1942 started off with increases of 49.2 in January, 33.8 per cent in February, and 12.3 per cent increase in March and showed decreases thereafter, with the result that at the end of the first 10 months, the traffic was 1.8 per cent under that of last year, indicating that the wartime traffic had levelled off. It is difficult to predict further traffic trends because, as indicated in Table No. 1, during wartime, the traffic fluctuates violently from month to month. As an example, a decrease of 12 per cent in May, 1940, was converted into an increase of 77.9 per cent in the following month, as compared with the previous year. Less violent fluctuations have occurred frequently since.

One of the changes that has taken place, particularly since the entry of the United States into the war, has been a largely increased traffic on several lines that previously handled only light traffic. This has involved many problems of organization. A somewhat similar problem has been brought about by the location of military establishments on branch lines that hitherto handled little traffic other than wheat. However, there has been no intensive industrialization of the Canadian west coast such as has occurred in the United States.

The Western Region Embraces Many Lines

The Western Region of the Canadian National comprises 11,533 miles of lines, between Port Arthur, Ont., and Armstrong on the east and the Pacific Coast at Vancouver and Prince Rupert, which latter point is only a few miles south of the Canadian-Alaskan frontier. It also includes the Duluth, Winnipeg & Pacific, operating in northern Minnesota between Fort Frances and Duluth. It is a single-track railway throughout, although alternate routes are available between many points that give it the effect of double-track.

The Western Region is in charge of a vice-president

and general manager, with headquarters in Winnipeg, Man., and is divided into four operating districts, under the jurisdiction of general superintendents, and further divided into 14 divisions, as shown in Table No. 2. The

Table No. 1. Fluctuations in Traffic During the War Years

	1939	1940	1941	1942
	%	%	%	%
January	−8.7	+39.1	−12.5	+49.2
February	−8.8	+33.8	−0.9	+33.8
March	+26.4	−23.4	+53.5	+12.3
April	+11.5	+50.7	+6.6	−0.0
May	+54.7	−12.0	+75.2	−9.2
June	+29.8	+77.9	+19.9	−3.6
July	+31.7	+45.3	+17.4	−0.6
August	+5.3	+16.2	+26.7	−7.8
September	+30.1	−39.2	+9.6	−13.6
October	−22.0	+11.3	+21.8	−7.3
November	+15.7	−7.3	+19.1	
December	+19.4	+46.2	−9.1	
Year	+12.0	+9.4	+16.6	−1.8 (10 Months)

Western Region also operates the Hudson Bay, a line extending from The Pas, Man., on the Dauphin division to the port of Churchill, on Hudson's Bay, a distance of 510 miles.

In addition, the Canadian National, in conjunction with the Canadian Pacific, also operates the Northern Alberta, 923 miles, which includes the line between Edmonton, Alta., and Dawson Creek, B. C., 495 miles, the latter point being the southern terminus of the recently constructed Alaska highway.

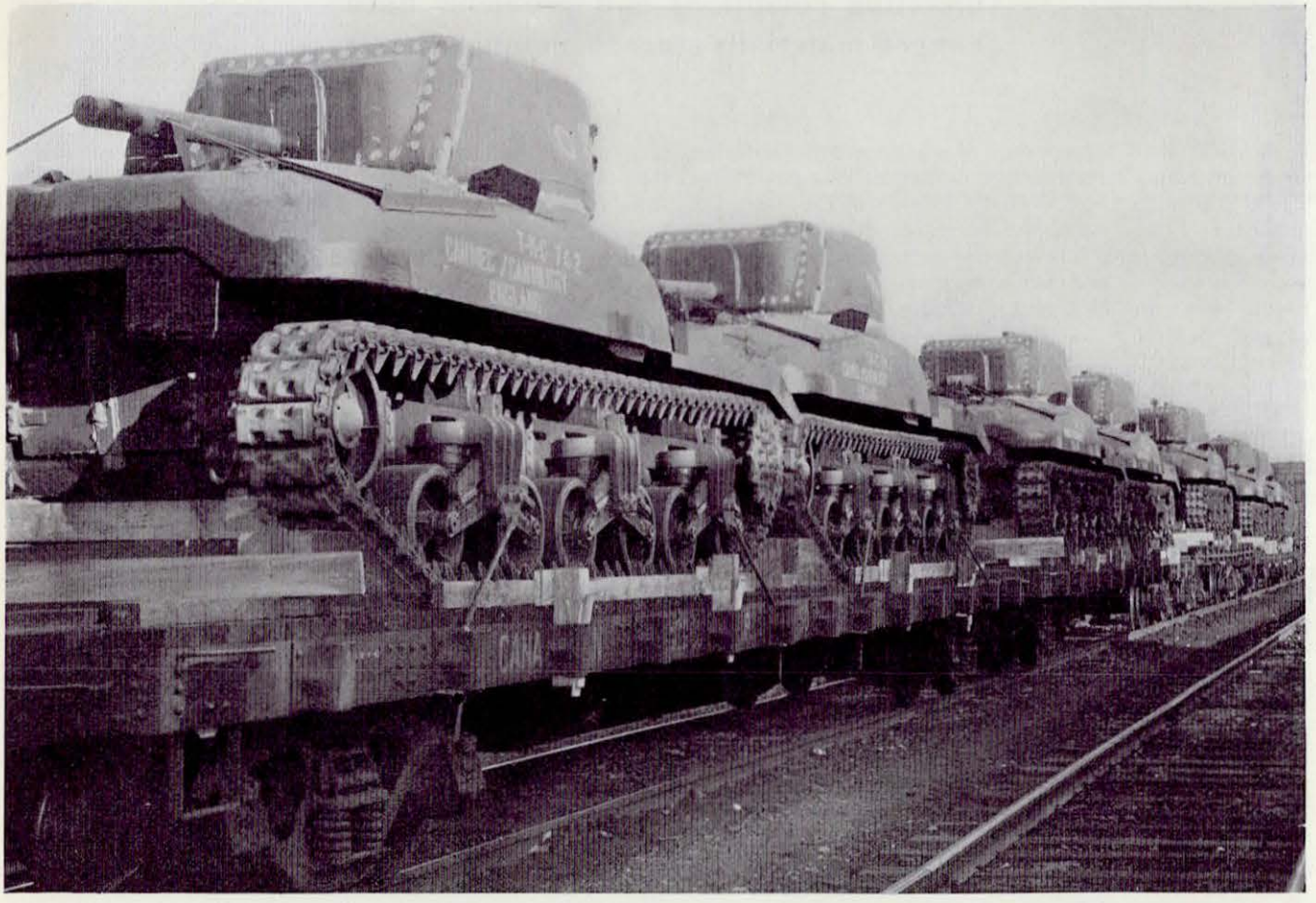
The prairie provinces, as indicated by the accompanying map, are criss-crossed by a network of lines, including numerous branches, the majority of which were built to serve this vast wheat-growing area. West of Edmonton, Alta., this network narrows to a single line through the Rocky mountains, beyond which, at Red Pass Junction, two lines extend to the Pacific Coast, one going southwest to Vancouver, the other northwest to Prince Rupert.

How Operations Are Conducted

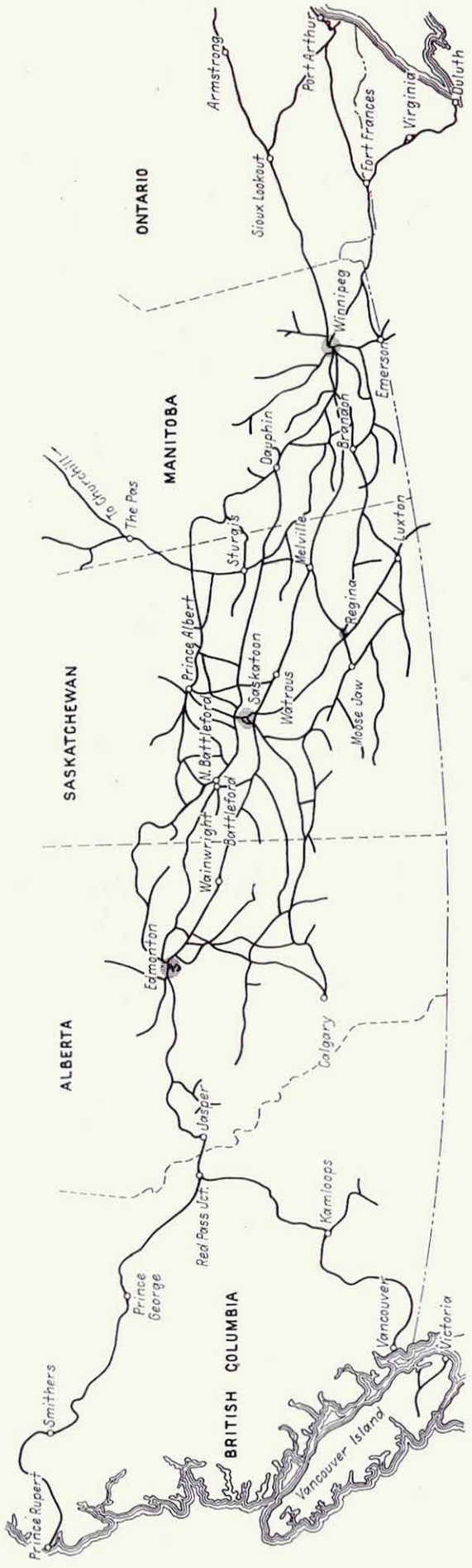
A glance at the map indicates that the network of lines in the wheat territory necessitated a large number of small concentration and forwarding yards. When the wheat was harvested and turned over to the railway in tremendous quantities for movement to the lake ports within a period of a few weeks, such yards were extremely busy places, at which trains of wheat were made up and funneled into Winnipeg. Beyond that point, loads were moved to the lakehead via the southern line through Fort Frances and empties were returned from

Table No. 2. Operating Districts—Canadian National Western Region

District	Divisions	Mileage
Manitoba	Lakehead	226
	Port Arthur	964
	D. & W. P.	168
	Winnipeg Terminal	215
	Portage-Brandon	1,784
	Dauphin	888
Saskatchewan	Regina	1,116
	Saskatoon	1,189
	Prince Albert	1,332
Alberta	Calgary	866
	Edmonton	1,467
British Columbia	Kamloops	625
	Smithers	677
	Vancouver Island	98



The Movement of Military Material Has Had the Right of Way for Over Three Years



The Western Region Extends from Lake Superior to the Pacific Coast

Port Arthur and Fort William via a branch line to Sioux Lookout and thence via the northern line into Winnipeg. Under the quota system now prevailing, however, the wheat rush no longer exists for the Wheat Board of Canada issues permits on a restricted basis, divided equitably between the growing areas. The result is a steady flow of wheat throughout the year, instead of a "grand rush" in a few weeks late in the fall.

This has materially affected operations in the principal yards of the Western Region, particularly Neebing yard, just west of Port Arthur, the only hump yard on the Western Region. This yard, where most of the wheat was formerly classified within a period of relatively few weeks, is now able to arrange its operations in a more orderly fashion. The result is that much pre-classification, as between the eastern and western lines, now takes place there and smoother operation is possible. The effects of this are felt in all the principal yards of the Western Region, which include those at Winnipeg, Saskatoon, Edmonton and Vancouver. To a somewhat lesser extent than at Neebing, all of these yards formerly had to arrange their operations to meet the wheat rush and now that this disturbing factor is no longer present, they are able to handle both the steady flow of wheat and the general traffic more efficiently.

Getting More Miles Per Car

The effects of this are clearly indicated in Table No. 3, which shows a comparison of freight car miles per serviceable car day. It will be observed that, in contrast with a general average of approximately 25 miles per car per day in 1938, this figure jumped to 46.1 and 49.2 miles in September and October respectively. In contrast, while thousands of cars were standing idle in the growing area awaiting wheat loading in August, the figure was much lower, bringing the average for the year 1938 down to 29.9 miles per car per day.

In the year 1939 this average was increased to 33.9 miles per day, largely by the record figure of 62.2 miles in September, 1939, immediately after the war began. No such figure was attained in any month in 1940, but

Table No. 3. Freight Car Miles Per Serviceable Car Day

	1938	1939	1940	1941	1942
January	28.1	21.1	35.3	36.4	48.5
February	27.1	21.4	36.7	39.2	59.0
March	25.3	24.8	26.1	39.1	52.2
April	24.7	24.2	35.7	44.3	49.9
May	22.5	35.3	36.6	58.0	48.6
June	19.3	24.8	49.9	62.7	53.9
July	23.7	31.4	45.5	57.6	49.9
August	28.1	32.8	40.7	57.3	47.6
September	46.1	62.2	48.8	57.9	46.0
October	49.2	47.8	45.9	64.3	
November	35.2	44.5	44.2	58.5	
December	22.0	30.1	47.8	46.6	
Year	29.9	33.9	41.2	51.9	50.1 (9 Mos.)

the fact that the mileage dropped under 30 in only one month brought the yearly average to 41.2 miles, an increase of 7.3 miles over 1939 and 11.3 miles over 1938. In 1941, the car mileage did not drop below 36 in any month, and a record figure of 64.3 miles in October of that year aided in bringing the average to 51.9, or 22 miles per car per day greater than in the pre-war year of 1938. The figures available for 1942 show that the mileage has not dropped below 46 in any month, so that the year should equal or surpass 1941.

The effect of the quota system in producing greater car utilization is strikingly illustrated by the fact that average miles per car per day were nearly 30 miles higher in August, 1942, than they were in August, 1938, before

tween Mullens and Page, and to 15 m. p. h. between Page and DB Tower.

Number of Trains

The daily scheduled train movements include one passenger train each way, one scheduled time freight westbound and two time freights eastbound. One local freight is operated eastbound one day and westbound the next day, excluding Sunday. The remainder of the traffic consists of trains of loaded or empty coal cars. Throughout this area the Virginian has numerous spurs and branch lines which serve coal mines. Coal for movement east is hauled to Elmore for assembly into trains. Also, solid trains of coal are made up at Elmore for movement westward to Dickinson, 16 miles west of DB Tower. The coal originating in the Mullens-DB Tower area for movement westward is picked up by westbound local freight or mine run trains. On each working day, one mine run operates a round trip between Elmore and Slab Fork, another such train operates to Glen Roger, and a third to Surveyor.

On the average, about four through coal trains are operated in each direction daily. The total number of movements, counting passenger trains, local freights, through freights, mine runs and helper moves, totals from 25 to 30 daily.

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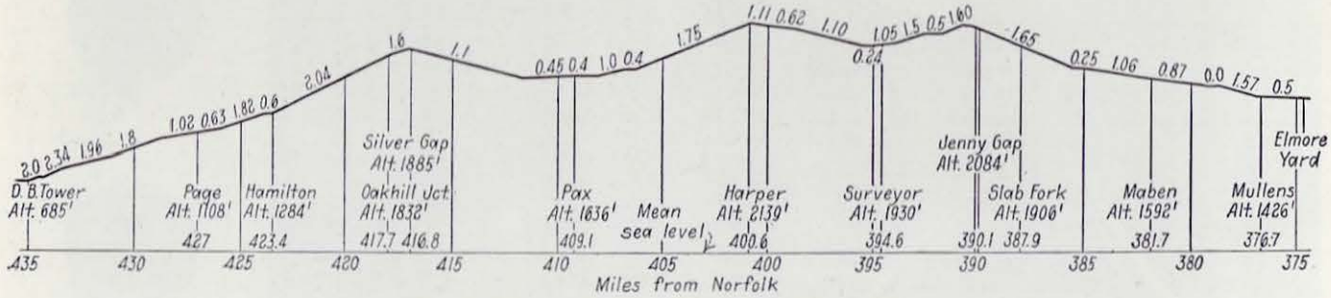

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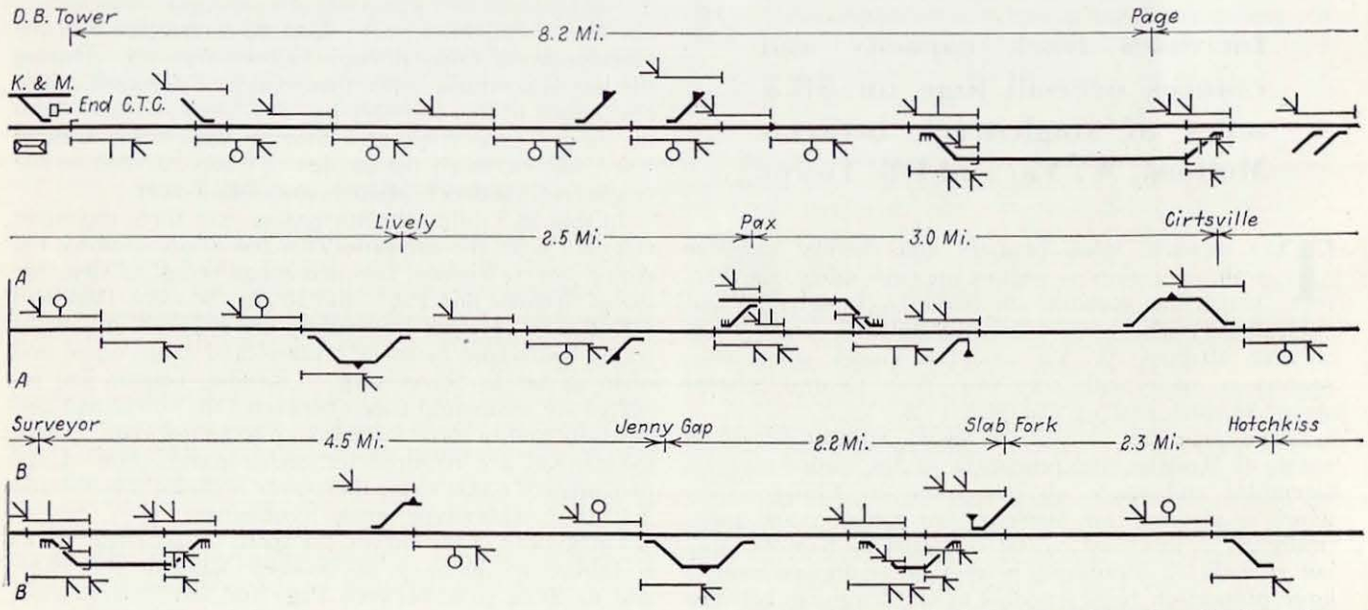

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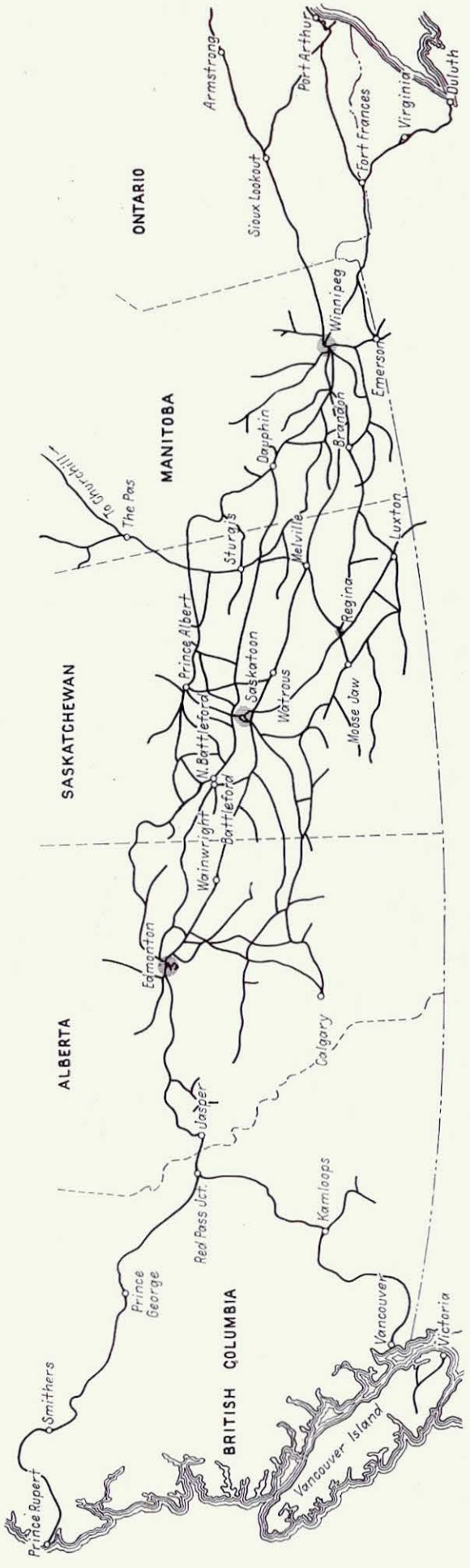


The Western Region Extends from Lake Superior to the Pacific Coast

Port Arthur and Fort William via a branch line to Sioux Lookout and thence via the northern line into Winnipeg. Under the quota system now prevailing, however, the wheat rush no longer exists for the Wheat Board of Canada issues permits on a restricted basis, divided equitably between the growing areas. The result is a steady flow of wheat throughout the year, instead of a "grand rush" in a few weeks late in the fall.

This has materially affected operations in the principal yards of the Western Region, particularly Neebing yard, just west of Port Arthur, the only hump yard on the Western Region. This yard, where most of the wheat was formerly classified within a period of relatively few weeks, is now able to arrange its operations in a more orderly fashion. The result is that much pre-classification, as between the eastern and western lines, now takes place there and smoother operation is possible. The effects of this are felt in all the principal yards of the Western Region, which include those at Winnipeg, Saskatoon, Edmonton and Vancouver. To a somewhat lesser extent than at Neebing, all of these yards formerly had to arrange their operations to meet the wheat rush and now that this disturbing factor is no longer present, they are able to handle both the steady flow of wheat and the general traffic more efficiently.

Getting More Miles Per Car

The effects of this are clearly indicated in Table No. 3, which shows a comparison of freight car miles per serviceable car day. It will be observed that, in contrast with a general average of approximately 25 miles per car per day in 1938, this figure jumped to 46.1 and 49.2 miles in September and October respectively. In contrast, while thousands of cars were standing idle in the growing area awaiting wheat loading in August, the figure was much lower, bringing the average for the year 1938 down to 29.9 miles per car per day.

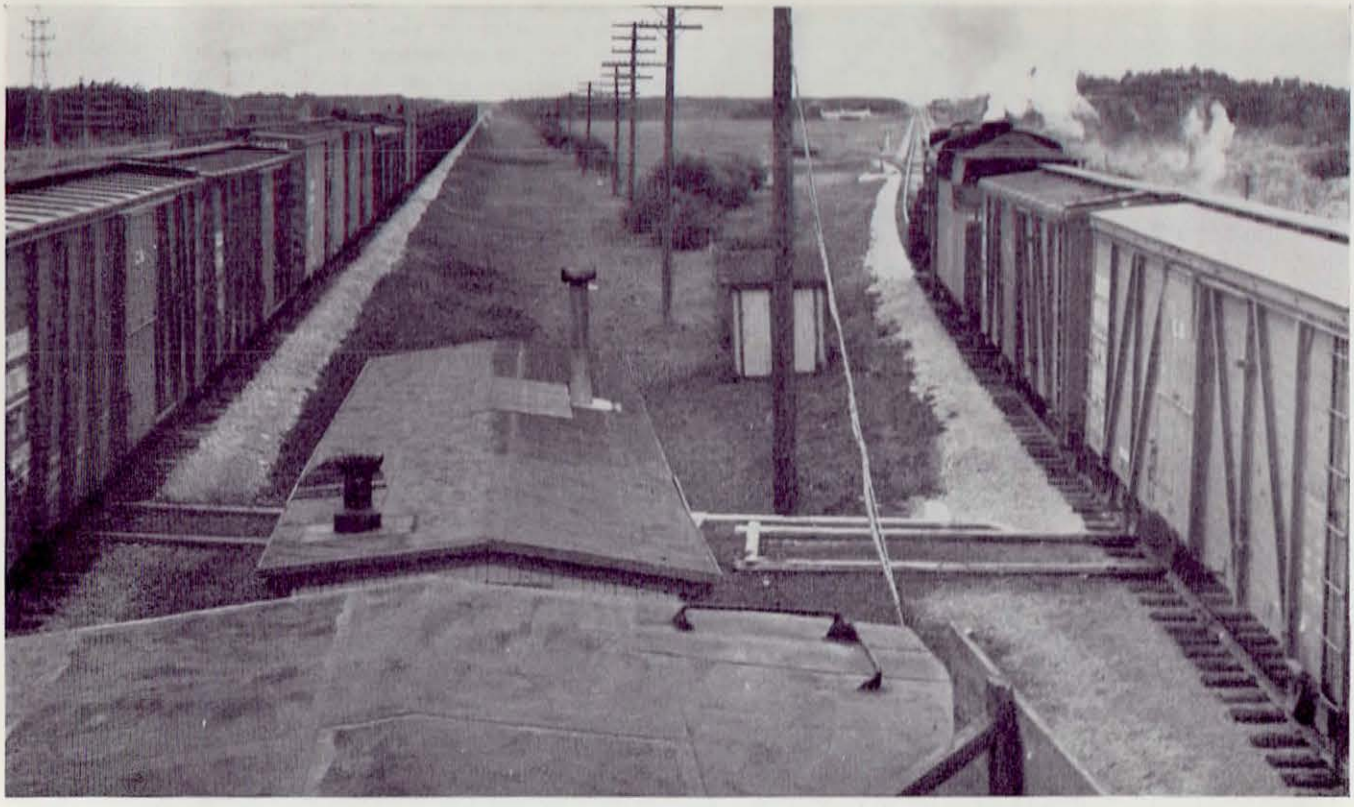
In the year 1939 this average was increased to 33.9 miles per day, largely by the record figure of 62.2 miles in September, 1939, immediately after the war began. No such figure was attained in any month in 1940, but

Table No. 3. Freight Car Miles Per Serviceable Car Day

	1938	1939	1940	1941	1942
January	28.1	21.1	35.3	36.4	48.5
February	27.1	21.4	36.7	39.2	59.0
March	25.3	24.8	26.1	39.1	52.2
April	24.7	24.2	35.7	44.3	49.9
May	22.5	35.3	36.6	58.0	48.6
June	19.3	24.8	49.9	62.7	53.9
July	23.7	31.4	45.5	57.6	49.9
August	28.1	32.8	40.7	57.3	47.6
September	46.1	62.2	48.8	57.9	46.0
October	49.2	47.8	45.9	64.3	
November	35.2	44.5	44.2	58.5	
December	22.0	30.1	47.8	46.6	
Year	29.9	33.9	41.2	51.9	50.1 (9 Mos.)

the fact that the mileage dropped under 30 in only one month brought the yearly average to 41.2 miles, an increase of 7.3 miles over 1939 and 11.3 miles over 1938. In 1941, the car mileage did not drop below 36 in any month, and a record figure of 64.3 miles in October of that year aided in bringing the average to 51.9, or 22 miles per car per day greater than in the pre-war year of 1938. The figures available for 1942 show that the mileage has not dropped below 46 in any month, so that the year should equal or surpass 1941.

The effect of the quota system in producing greater car utilization is strikingly illustrated by the fact that average miles per car per day were nearly 30 miles higher in August, 1942, than they were in August, 1938, before



The War Has Meant Increased Operating Problems on the Western Region

the system went into effect. It is particularly fortunate that this situation exiss this year for, wih the greatest crop in Canada's wheat-growing history, important war freight and troop movements would have been disorganized and delayed under the strain of handling the huge crop.

Locomotive Utilization Improves

Co-incident with the improvement in car handling, the utilization of locomotives has also improved. As shown in Table No. 4, the daily mileage of freight locomotives has been increased 26 miles—from 83 in 1938 to 109 in the first nine months of 1942. The effect of the wheat rush on freight locomotive utilization is apparent here also, for in 1938, the average dropped as low as 68 miles in some months and increased to 110 miles in October.

Table No. 4. Daily Locomotive Mileage—Excluding Stored

	Freight Locomotives					Passenger Locomotives				
	1938	1939	1940	1941	1942	1938	1939	1940	1941	1942
January	82	70	91	96	108	174	166	181	171	177
February	85	79	90	99	105	175	166	170	169	178
March	76	79	75	96	100	173	173	164	163	174
April	73	75	95	99	103	183	172	177	163	176
May	71	92	94	123	113	176	178	173	170	170
June	68	74	113	126	120	169	174	176	158	184
July	75	84	107	115	110	163	170	179	173	198
August	84	89	99	120	109	168	174	180	171	190
September	105	131	107	119	112	179	185	174	179	203
October	110	107	103	121		181	173	170	171	
November	87	98	102	112		182	174	165	177	
December	71	82	113	100		177	177	173	175	
Year	83	90	99	111	109 (9 Mos.)	174	173	174	170	184 (9 Mos.)

In 1942, on the contrary, freight locomotive miles averaged over 100 per day in each of the first nine months, for the first time in the history of the Western Region. Passenger locomotives also showed increased utilization, the average daily figure having increased from 174 miles in 1938, to 184 miles in the first nine months of 1942. It is interesting to observe that, in July, 1942, the daily mileage rose above 190 for the first time in history and reached an all-time high of 203 in September. The percentage of locomotives awaiting repairs is running about 6 per cent and locomotives under repairs about 5.5 per cent of the total on the Western Region, which are the lowest figures ever accomplished.

These results have been obtained through careful study of the possibilities for increasing locomotive utilization. Extended locomotive runs have been put into effect wherever it could be demonstrated that operating efficiency would be increased thereby. Leading off with a run of 1,037 miles between Winnipeg and Jasper, the Western Region operates passenger locomotives through for 250 miles or more in 12 instances. Freight and mixed train locomotives are operated through for 200 miles or more in eight instances, the longest freight run being between Transcona (Winnipeg yard) and Melville, 286 miles. On adjoining engine districts the following runs are made:

Sioux Lookout to Transcona, 245 miles
Transcona to Melville, 286 miles
Melville to Biggar, 256 miles
Biggar to Calder, 264 miles

Thus, only four locomotives are used on a continuous freight run of 1,051 miles. Two locomotives handle the mixed train run of 478 miles between Prince George, B. C., and Prince Rupert.

Physical Characteristics of the Property

From the standpoint of mileage operated, the Western Region is by far the largest portion of the C. N. Its total of 11,533 miles compares with 7,504 miles for the Central Region and 3,076 miles for the Atlantic Region. It comprises a consolidation of the former Canadian Northern, the Grand Trunk Pacific and other smaller

lines. For nearly ten years, under the regime of Sir Henry Thornton, the Western territory was the scene of a very large amount of new line construction, grade revision, curve elimination and a wide variety of other projects designed to weld the separate railways into an effective, unified system. This construction period lasted approximately from 1921 through 1930. Since this period, the problem, insofar as the physical structure of the railway is concerned, has been one of efficient maintenance rather than of new construction. As a result no new projects of importance have been undertaken in the last decade, the effort being directed to building up the existing plant and facilities.

During this time, a steady and continuing program of track betterment has been pursued, with the result that 1,425 miles of the main line are now laid with 100-lb. rail, 326 miles with 85-lb. rail and 183 miles with 80-lb. rail. During 1942, a program of laying 150 miles of new 100-lb. rail was completed. During the first 10 months of that year, 2,855,694 ties were renewed, of which 1,045,786 were treated. The 1943 program calls for the insertion of about 3,000,000 new ties.

New Telegraph Building in Winnipeg

One of the improvements that permits greater operating efficiency has been the construction of a modern building in downtown Winnipeg, principally to provide commodious quarters for the C. N. telegraph and passenger department. The telegraph department handles a large volume of commercial messages in Canada, as well as the wire traffic for the railway and the demands of war resulted in greatly increased business.

The four-story building is of modern construction and is 50 ft. wide by 185 ft. long. The ground floor contains the railway ticket office, the ticket office of the affiliated Trans-Canada Air Lines and the commercial telegraph office. The basement contains the telegraph department's mechanical equipment, battery and power rooms and store rooms. The entire second floor is also occupied by the telegraph department, while the third and fourth floors house railway departmental offices. The new building not only permits the most modern plant for the telegraph department, but has also provided a better allotment of space in the general offices of the railway, which are located on the top floors of the C. N. R. station.

Personnel Problems Caused by War

Despite the relatively less dense population in western Canada than in the United States, the Western Region of the Canadian National, while needing more men in certain categories, is not in as desperate straits for manpower as are some of the United States railways. Since 1938, the total number of employees has increased only from 25,665 to 27,494 employees in 1942.

As with the selective service operation in the United States, there has been some lack of uniformity on the part of governmental authorities in determining what are essential occupations. The general rule for all of Canada, as quoted from the regulations, provides that the railway prepare lists of shop crafts; train, engine and yard; maintenance of way and structures; telegraphers; linemen; signal maintainers; express vehiclemen; and dining, sleeping and parlor car employees.

When these lists disclose that the number of men in any particular class subject to call at any one location is such that it would hamper the railway, this fact is reported to the National War Services Board and relief is requested.

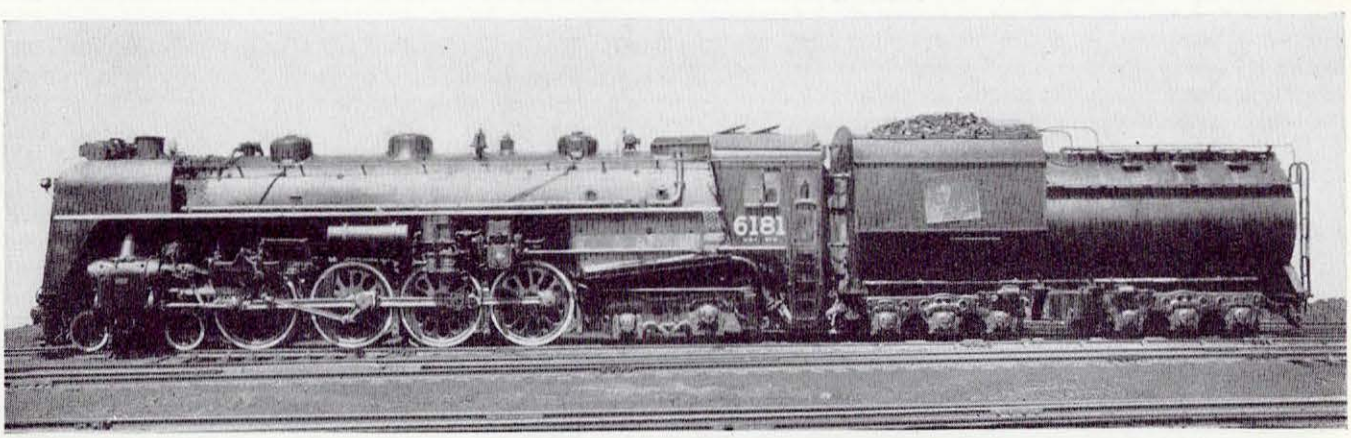
Downward Trend of Operating Ratios

In the final analysis, the operating ratios of the Western Region since the war, as shown in Table No. 5, reflect the situation accurately. Additional operating costs brought about by the severe winters of the region which it traverses have always increased the ratio in the winter months.

Table No. 5. Operating Ratios During the War Years

	1939	1940	1941	1942
January	111.12	90.03	79.02	72.85
February	109.33	81.48	84.95	81.05
March	104.10	96.55	81.85	72.58
April	95.37	93.26	70.11	72.01
May	77.80	80.63	59.78	69.89
June	101.09	76.89	65.73	65.21
July	91.81	70.61	71.63	63.42
August	84.35	74.23	68.27	60.20
September	51.60	68.89	67.64	60.35
October	59.25	68.50	63.66	55.72
November	59.57	66.09	67.81	64.29
December	79.51	65.42	66.73	
Year	77.93	75.54	69.45	65.93 (11 months)

Before the wheat rush was stopped through the quota system, the heavy traffic of the fall months had a distinct tendency to reduce the operating ratio. There is still a noticeable difference from month to month in the ratio, but the differences have leveled off materially and the final result of an operating ratio of 65.93 in 1942, as against 77.95 in 1939 indicates clearly how efficiently operations have been attuned to wartime conditions.



New Power Has Meant Much to the Canadian National

The Span As It Appeared Immediately Following the Explosion of the Dynamite and Before It Fell

Blow Old L. & N. Bridge Span Into Nation's Scrap Pile*

Donated by the railroad, army does the rest with 200 lb. of rapid-burning dynamite, bringing 268-ft. structure within easy reach for salvage operations

AT 1 p. m. on November 17 last, the old Louisville & Nashville steel span across the Kentucky river at Irvine, Ky., 268 ft. long, was, at most, an ornamental part of the landscape and reminiscent of an earlier day in railroading in that territory. Only a few seconds later, the huge span, containing approximately 372,000 lb. of steel, had disappeared entirely from view in the waters of the Kentucky river, from which it was soon to be recovered as a part of the railroad's contribution to the nation's wartime scrap pile. The span had been dynamited by a battalion of the 387th Engineers from Fort Knox, Kentucky, with the approval of the railroad, if not the invitation, and thus formed not only one of Kentucky's most sizeable donations to the nation's scrap drive, but also a practical example in the army's study of the most effective means of bridge demolition.

The bridge demolished had been built in 1893 by the old Richmond, Nicholasville, Irvine & Beattyville Railroad, later to become the Louisville & Atlantic, which was taken over by the L. & N. in 1909. This line between Cliffside, Ky., near Frankfort, and West Irvine, Ky., was abandoned in 1932, but the line between Irvine and West Irvine, of which the old bridge was a part, had been left in place to serve a lumber company at West Irvine.

The lumber company discontinued operation in October, 1940, but the bridge had not been removed, remaining as a sort of involuntary memorial (because of the cost of removal) to a once-flourishing Bluegrass carrier.

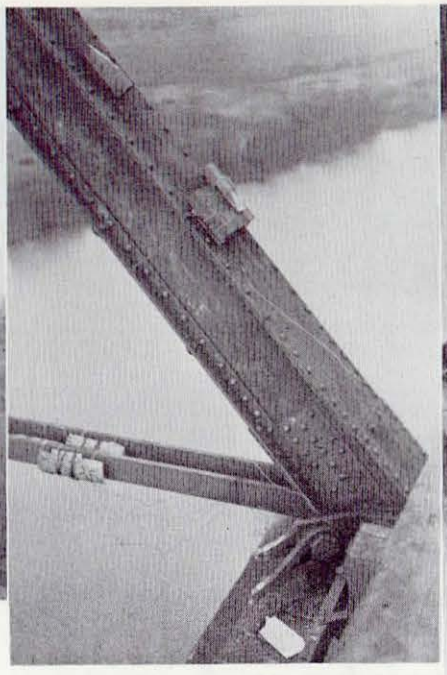
The recent nation-wide intensified scrap drive, however, brought the old span into the limelight again, and it was suggested that the road might donate the structure to the scrap drive, via the U. S. Army, which might consider its dismantling as a demolition exercise for its troops. Subsequently, the railroad offered the bridge to Lt. Gen. J. L. Devers, at Fort Knox, on September 26, and Gen. Devers accepted for the Army shortly thereafter. It was agreed that the Army would demolish the structure and salvage the metal, less the rails, which would be retained by the railroad.

On October 24, soldiers from the 387th Engineer Battalion, Fort Knox, under the command of Maj. J. C. Potter and Lt. L. G. Kramp, moved in on the bridge and, while awaiting permission from the U. S. Engineer office at Cincinnati, Ohio, which desired to satisfy itself that the proposed destruction would not interfere with navigation on the Kentucky river, busied themselves with the removal of surplus steel and the flooring of the structure, and with the placing and wiring of the dynamite so that it might be most effective in total destruction of the span.

By November 17, permission had been granted and all was in readiness to demolish the span. Altogether,

* Adapted from an article which appeared in the December, 1942, issue of the Louisville & Nashville magazine, to which publication we are also indebted for the accompanying photographs.

Looking Through the Span, With the Deck Removed, Just Before the Charges Were Set Off



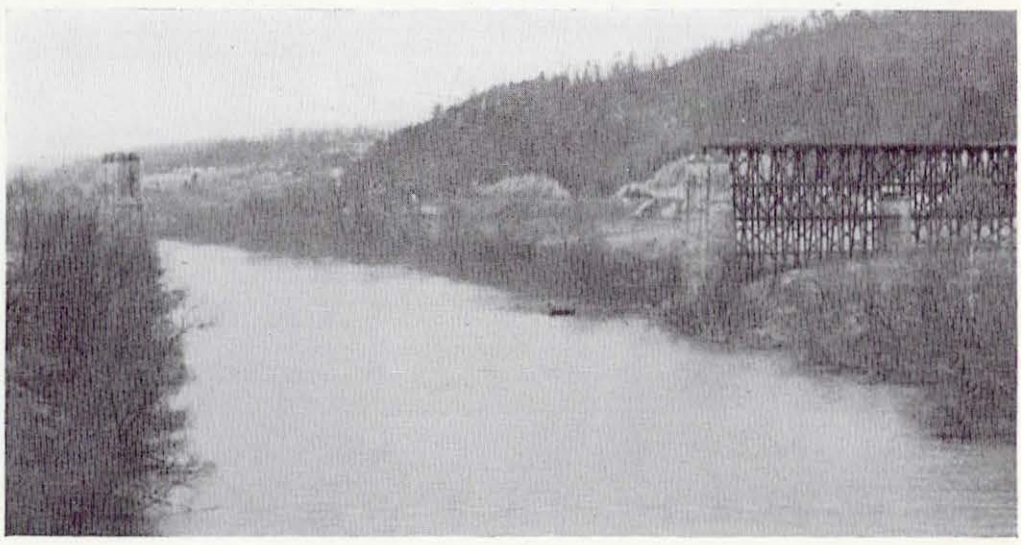
View Showing the Locations of the Dynamite Charges at the Four Corners of the Span

The U. S. Army Barge and Crane Employed in Salvaging the Span From the River Bottom

200 lb. of rapid-burning dynamite were spotted strategically at the bridge portals. Twenty-three pounds of the explosive were placed on the underside of each end post of each truss, and, as a counter-force to shear the steel, nine pounds of dynamite were securely fastened and packed to the top side of each end post. Each bottom chord of the truss at both ends was fitted with an 18-lb. charge of dynamite, this charge, in each case, being divided equally between the outside and inside of the chord. At each end of the span, therefore, there were charges of 100 lb. of explosive; 50 lb. distributed between each end post and bottom chord on each side of the roadway. The detonator, which was connected to the various charges through a system of electrical wiring to bring about simultaneous explosions, was located a safe distance from the structure.

Witnessed by a crowd of several thousand persons, including many prominent local, state, railway and Army officers, the demolition charge was set off at 1 p. m. on November 17. That the dynamite did its work quickly, as well as effectively, is indicated by the fact that the span disappeared from view in the river a few seconds after the detonation. Some indication of the force of the blast may be gained from the fact that one piece of steel plate approximately one foot square fell on a highway about 1,600 ft. from the bridge, while another piece of about the same size was blown a distance of about 2,800 ft.

Shortly following the demolition of the structure, the 387th Engineers began the work of recovering the steel, employing an army barge, a crawler-type crane mounted on the barge, and both under-water and above-water oxy-acetylene cutting torches. The demolition of the bridge caused no interference with navigation on the river, since the salvage barge could be moved at will to clear for traffic, and since even immediately following the destruction of the span, there was a clearance of about 7½ ft. between the highest of the wrecked steel and the surface of the water.



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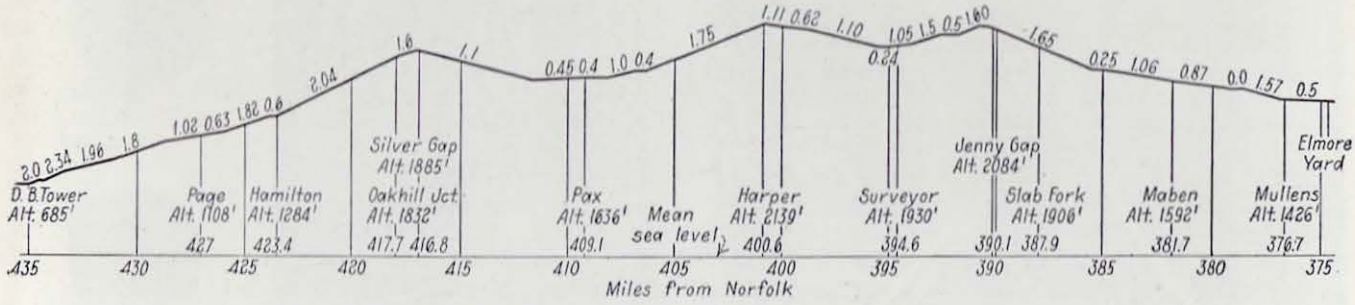

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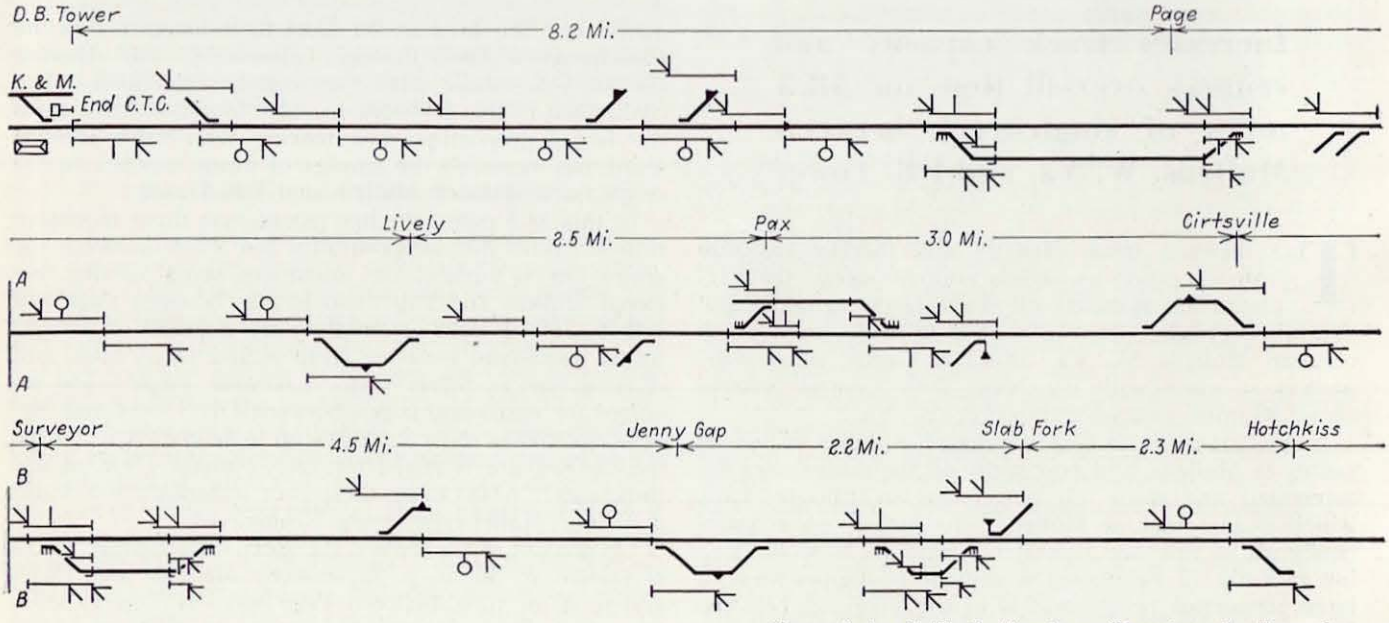

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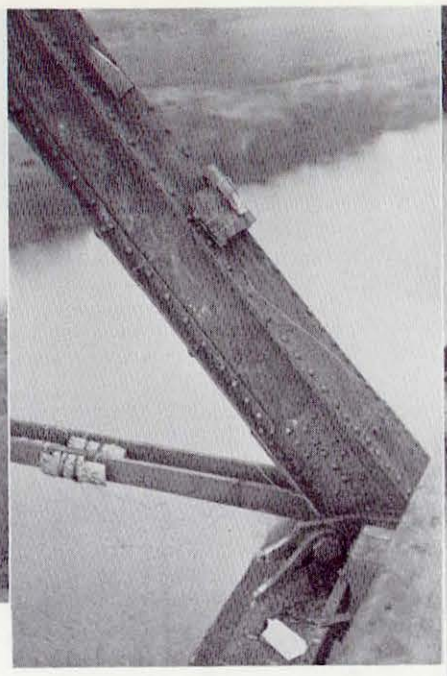

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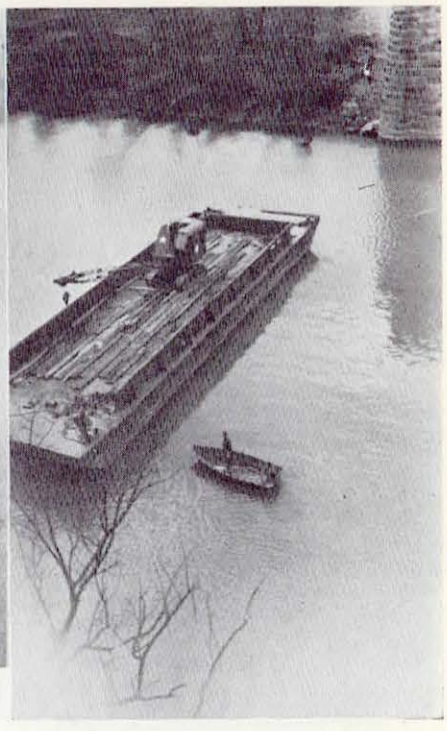

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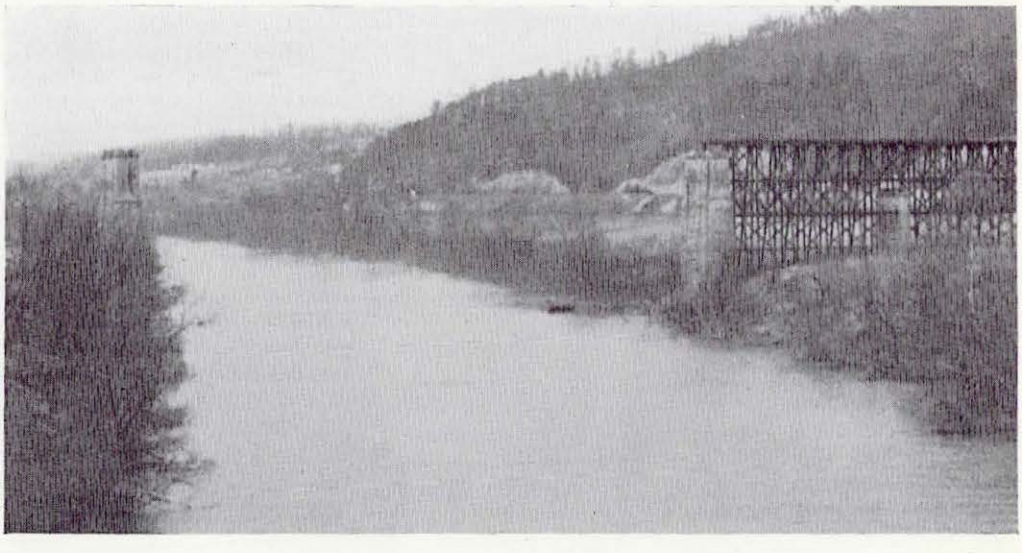

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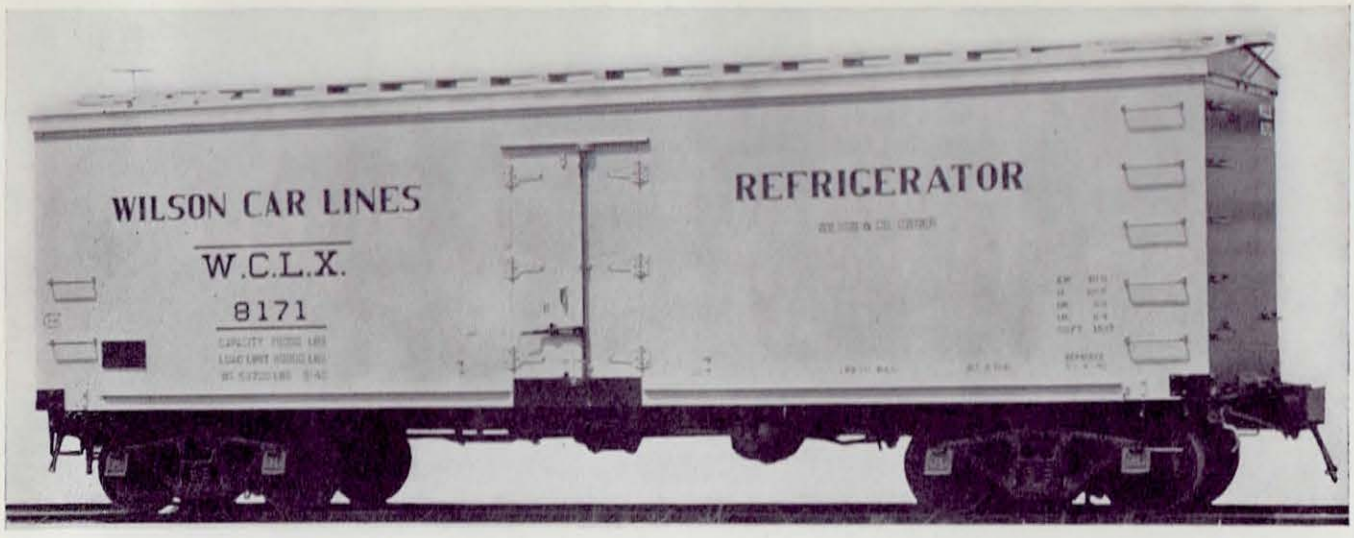


Plywood Refrigerator Car Built in 1940

Refrigerator Cars of Plywood*

Valuable experience now being accumulated with cars built of this material which is at present largely devoted to marine and other important war-time uses

By Harry A. Dodge

Sales Engineer, Harbor Plywood Corporation, Chicago

THERE is nothing new about the basic principles of plywood and they can be traced back to the ancient Egyptians. What is new is the technique of manufacture which, while producing in mass quantities, improves regular plywood from a product intended for uses such as kitchen cabinets into a plywood suitable for refrigerator cars and heavy construction, including marine and other war-time exterior applications where it is for the present almost exclusively used.

The most important point in connection with the successful use of plywood in refrigerator cars or any railway equipment is that the proper type of plywood be selected.

Plywood, regardless of the type, of which there are many, consists of an odd number of veneers bonded together with the grain of each adjoining ply at right angles to the other and, although the appearance may be basically the same, we have to go into the technique of manufacture to really determine if it is suitable. A responsible plywood manufacturer has no desire to supply a plywood not intended for the use to which it will be put, and the manufacturer's recommendations should always be observed.

I am going to refer briefly to the basic technique used by the Harbor Plywood Corporation in manufacturing plywood in the Pacific Northwest, in accordance with the requirements for exterior-type Douglas fir plywood in the United States commercial standards plus rigid individual requirements as set up by our engineers and production men. The manufacture of this plywood was first started in 1935, at which time applications were made to determine its performance in refrigerator cars. These applications were highly successful and, from that time on, progress was rapid and performance was almost beyond expectations. This plywood is the best that we can produce to resist decay and the effects of water and weather, and is a scientific development which comes more in the category of an engineered lumber than just plywood.

How "Engineered" Plywood Is Manufactured

The logs are cut into desired lengths which results in what is known as peeler blocks. The peeler blocks are cut into veneer on a rotary-type lathe which revolves the peeler block against long, sharp knives. This action results in a flow of veneer emerging from the machine in a continuous sheet in much the same manner as unwinding a roll of news print. Following this operation, the veneers are cut to desired widths in a clipper machine and subsequently dried to the proper moisture content. Particular care is given the drying operation so that the strength and tenacity of wood fibers are not damaged. It is an accurately-controlled system, insuring the uniform exhaustion of moisture and the setting of natural resins. The operations up to this point in the manufacture are basically the same, regardless of the type of plywood to be manufactured with the ex-

* Abstract of a paper presented at the December 14, 1942, meeting of the Car Foremen's Association of Chicago.

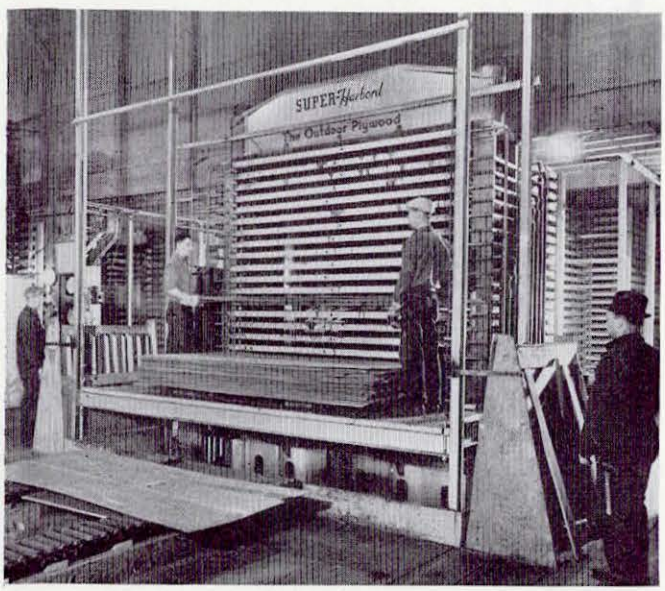
ception that the moisture content required and the thickness of veneer required for a given thickness of plywood usually differ.

To make the proper type of plywood, the most important operation, following the cutting and drying of veneers, is the laminating or fusing process. Under controlled conditions a weatherproof thermo-setting phenolic or cresylic-formaldehyde-type synthetic resin is spread on the inner cross plies in a pressure-roll-coating machine. The panels are temporarily assembled and following this are put into giant hydraulic hot-plate presses with each panel separated between hot plates. The pressure and heat in the press are applied simultaneously, and this causes the binder or resin to fuse the veneers together. The panels must be held in the press for a certain period under certain definite temperatures to properly fuse the resin. This lapse of time has a tremendous effect on production and cost, and it would be possible to shorten this time by the use of other types of resin, but we have not yet been able to get equal performance out of them. This, along with other operations, is done under full laboratory supervision and results in a bond which is unaffected by moisture and which is stronger than the wood itself.

Why Hot-Press Panels Must Be Tempered

It has been our finding that the hot plate press operation often results in an unbalanced moisture content and, panels put into the field in this condition are subject to warpage due to contraction and expansion. In view of this, the panels are put through a tempering or humidification process where, under thermally-controlled conditions, moisture is put back into the panel in such a way that it balances the moisture content between opposing veneers. This corrects the normal possibility of warpage and gives the panels proper moisture content, to permit the car builder to apply them without allowing for contraction and expansion.

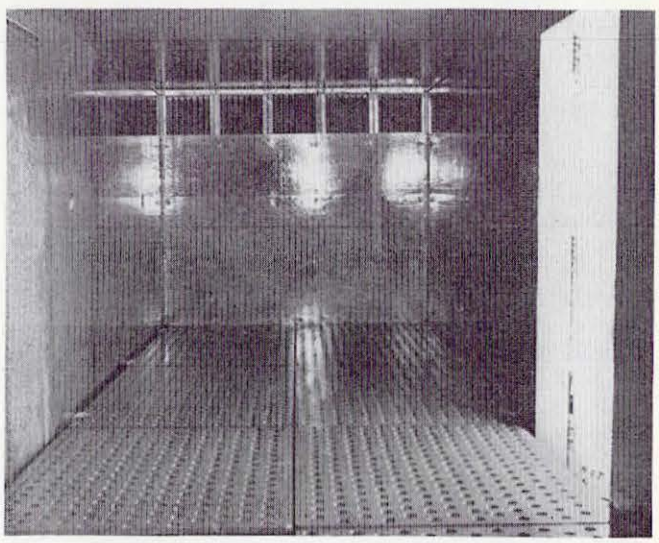
Following the humidification process, the edges of the panels are accurately trimmed to close tolerances, and the faces are sanded when specified. The final step is a very rigid and close inspection prior to shipment. Tests are conducted in the laboratory at regular intervals to determine performance. The edges of the panels, made under this process, are branded with the identifying, burned-in trademark "Super Harbord", and a distinctive green binder line between the veneers serves as a protection for both user and manufacturer. By mutual co-operation, especially in the last five or six years, and a better understanding of each other's problems, the car builder has been able to develop his specifications and applications to better advantage, and the mill has been able to improve its product.



One of the Large Hot-Plate Presses Used In Making Plywood Panels

Improved Plywood Used in Refrigerator Cars

Since Super Harbord plywood was first used in refrigerator cars in 1935, there have been thousands of additional applications for repairs to cars, and hundreds to new or rebuilt cars, in the latter cases, plywood being generally used for all-over construction. The performance of these cars has been watched closely and the differences in technique or system of application used by the various builders are slight. It is felt that even these slight differences will be eliminated as time goes on. We are encouraging standardization as nearly as possible, considering the many types of refrigerators in operation. Among those who have built all-plywood cars are the General American Transportation Corporation, Fruit Growers Express Company, Wilson Car Lines, North American Car Corporation, St. Louis Refrigerator Car Company, and the Pacific Fruit Express Company. The co-operation received from these concerns and many others using plywood has been highly gratifying.



Refrigerator Car with Plywood Inside Lining

Reports on the advantages of plywood in refrigerator cars are numerous, and I will attempt to give you a brief outline of some of these findings. Because the material is wood, it has a low heat conductivity and is, therefore, a suitable material for refrigerators. It comes in large sheets, and it is possible to build with few or no unsupported joints, which ordinarily permit free passage of vapor. One company, building 40-ft. all-plywood cars, has eliminated 86.5 per cent of the linear footage of joints, compared with tongue and groove construction. This makes it an ideal housing for insulation because the insulation is kept in a dry condition. Also the type of resin binder used tends to reduce vapor transfusion through the material.

In still another program of all-plywood cars, the number of pieces per car has been reduced about 89 per cent and only 3.6 per cent as many holding screws and nails

are required as in conventional tongue-and-groove construction. This elimination of parts greatly increases the strength of the car and reduces construction time.

Savings in dead haul weight of as high as 6,124 lb. have been made in 40-ton refrigerator cars, compared with conventional tongue-and-groove construction. This saving is due to a reduction in material weight and in the number of framing members previously required to give the car strength. As time goes on, it is possible that the weight reduction, through elimination of excessive framing, will be greatly increased. It is readily appreciated that large sheets of material, such as this, provide a diaphragm, or stressed covering type of strength, with which weakness of excessive joints can be eliminated.

Refrigerator cars involving all-plywood construction have been built at costs comparable with conventional wood cars. In some parts of the cars, the cost of material may be slightly higher. Where this occurs, it can be offset by increased production and a lower cost for other car parts. In some details such as tank linings and roof structure, it has been possible to reduce greatly the thickness of material, compared with conventional wood construction, and at the same time give the car more of the type of strength it really needs. A sheet material properly applied, particularly in the roof structure and side walls is far more valuable, from the standpoint of strength, than heavy bulk thickness.

Worn or Damaged Plywood Panels Easily Repaired

The subject of repairs to damaged sheathing has come up, and the answer to this is to either replace the entire panel, or to make repairs to the damaged portion of the panel. New types of plastics are available which make it possible to permanently repair a surface scar without removal of the sheet. It is also possible to cut clear through the panel, removing the damaged part and repairing the panel without removing it from the car. This technique will be fully and more completely developed later, as it becomes necessary, and I am only making mention of the matter so that you will realize full consideration is being given the repair problem. We must keep in mind that this material is wood and that wood is easily worked with just ordinary tools.

In addition to the applications to all plywood refrigerators, the car builders I have mentioned, together with several other leading companies, are making good use of the material in various parts of new cars, and in repair cars. Some companies find it more suitable for linings or top floors and others find it desirable for siding; still others for end bulkheads, depending upon their particular problems.

Not Subject to Cinder Leakage

Perhaps the most outstanding applications to repair cars have been the methods used to eliminate cinder leakage. This has been an important development and about five different companies are using the material for this purpose. In case, it is possible to remove the roof and get into the carlines of the car, the most acceptable method is to apply the plywood over the tops of the carlines, breaking the panel joints at a carline approximately every eight feet. The panels are nailed in place at the carlines, center ridge and side plate and, because there are so few joints and none of them unsupported, it is unnecessary to take additional precaution. However, the joints are usually caulked with a suitable mastic, or other methods are used, as additional insurance against cinder leakage.

In the majority of cases it is impossible to remove the roof and make repairs along the lines I have described and, where this is the case, the most popular method is to apply a secondary ceiling of thin plywood direct to the old ceiling. The panels used are usually 48 in. wide and they are applied in one long length, stretching from side to side, extending over the side wall lining boards. A strip of paper is applied around all edges of the panels between the panels and the original ceiling. Short nails are used on about 12-in. centers intermediate and about 6-in. centers at the panel edges. This system, of course, does not keep cinders out of the car itself. However, it is found that it does, when properly applied, minimize leakage of cinders into the body of the car. I have made inspections of 40-ft. cars where after a comparatively short time it was necessary to use shovels and wheelbarrows in removing the cinders that would have ordinarily passed on to the lading and probably resulted in damage claims by shippers.

In other cases, as a precaution against cinder leakage, car builders remove the entire original ceiling and replace it with a heavier, more permanent thickness of plywood. This is usually applied in one long length from side to side with the cross joints breaking at the carlines.

(At the conclusion of his address, Mr. Dodge presented a all-color, all-sound moving picture, "Food For Total Security," recently made for the Harbor Plywood Corporation, which illustrated the contribution of the railroads and private refrigerator car companies to the war program by supplying food required for military forces and defense workers, as well as the balance of the civilian population. The film also showed at some length the technique used in constructing 100 all-plywood refrigerator cars in the Los Angeles, Cal., shops of the Pacific Fruit Express Company in the fall of 1940, and the application of plywood to the interior of a series of steel refrigerator cars.—Editor.)

Mediation Fails In Non-Op Wage Case

EFFORTS of George A. Cook, chairman of the National Mediation Board, to mediate the demands of the 14 non-operating unions and the Hotel and Restaurant Employees' International Alliance for a wage increase of 20 cents an hour, a minimum wage of 70 cents an hour and a closed shop, which were begun at Chicago on January 7, failed on January 15 and on the following day both parties refused to arbitrate some or all of the points at issue. In announcing the failure of mediation, Mr. Cook stated that the next step will be an application by the unions to William M. Leiserson, chairman of the National Railway Labor Panel, asking that body to assume jurisdiction. "This would mean," Mr. Cook said, "that there will be no necessity for taking a strike vote or fixing a date to strike."

When mediation ended, the question was undecided as to whether a decision rendered by the Panel will be final or must be approved by the National War Labor Board. The railroads, in their recommendations for an executive order, hold that wage adjustments made by the National Railway Labor Panel must be in keeping with the inflation control policy established by the National War Labor Board and must have its approval. The unions wish the Panel to be independent, contending

(*Continued on page 253*)

Left—A Train On a Siding. Below —Typical Station Signal

Virginian Installs C. T. C.

Increases track capacity and reduces over-all time on 58.5 miles of single-track between Mullens, W. Va. and DB Tower

TO increase track capacity and thereby expedite train operation as well as improve safety, the Virginian has installed automatic block signaling and centralized traffic control on 58.5 miles of single track between Mullens, W. Va., and DB Tower, where connection is made with the New York Central System about 30 miles east of Charleston, W. Va.

Large quantities of coal are mined within a fifty-mile radius of Mullens, and practically all the loaded cars are assembled and made up into trains in Elmore Yard which is just east of Mullens. In earlier years, practically all of this coal moved eastward to Norfolk, Va., but recently an increasing percentage is shipped west, a large proportion being handled by the Virginian between Elmore and Dickinson near Charleston, while the remainder is delivered to the Norfolk & Western and the Chesapeake & Ohio through Gilbert, W. Va. During the last year, traffic other than coal has increased. The coal mined in this territory has also increased, and, with the larger proportion now moving west from Elmore Yard, has increased the number of trains handled on the single-track between Mullens and DB Tower.

In this 58.5 miles, the line passes over three mountain ridges. With the exception of a few short sections, the entire line is curved, the maximum being 12 deg. between Mullens and Page, and 16 deg. between Page and DB Tower. Helper locomotives are required on freight trains westbound between Mullens and Jenny Gap, and often as far as Silver Gap. Likewise, helpers are required for eastbound trains between DB Tower and Silver Gap, and in most instances up to Jenny Gap. Three locomotives are required for each tonnage train of approximately 6,000 tons; the power includes 2-8-8-2 and 2-10-10-2 Mallet-type steam locomotives.

On account of the curves, the speed of passenger trains is limited to 30 m. p. h. between Mullens and Page, and to 20 m. p. h. between Page and DB Tower, while the speed of freight trains is limited to 25 m. p. h. be-

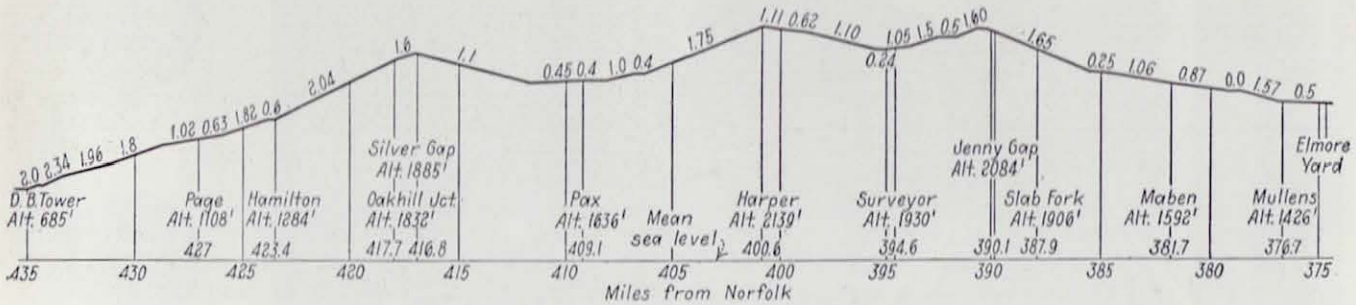
tween Mullens and Page, and to 15 m. p. h. between Page and DB Tower.

Number of Trains

The daily scheduled train movements include one passenger train each way, one scheduled time freight westbound and two time freights eastbound. One local freight is operated eastbound one day and westbound the next day, excluding Sunday. The remainder of the traffic consists of trains of loaded or empty coal cars. Throughout this area the Virginian has numerous spurs and branch lines which serve coal mines. Coal for movement east is hauled to Elmore for assembly into trains. Also, solid trains of coal are made up at Elmore for movement westward to Dickinson, 16 miles west of DB Tower. The coal originating in the Mullens-DB Tower area for movement westward is picked up by westbound local freight or mine run trains. On each working day, one mine run operates a round trip between Elmore and Slab Fork, another such train operates to Glen Roger, and a third to Surveyor.

On the average, about four through coal trains are operated in each direction daily. The total number of movements, counting passenger trains, local freights, through freights, mine runs and helper moves, totals from 25 to 30 daily.

On the new C. T. C. territory between Mullens and DB Tower there are 11 passing tracks. Studies showed that the C. T. C. should enable trains to move over this territory in less time and thereby reduce the number of occasions for using passing tracks. On this basis, no power-operated switches and semi-automatic signals were installed at the passing tracks at Lively, Cirtsville and Hotchkiss, which are now used only for storing cars. When a train is to set out or pick up cars at one of these tracks, a part of the train is left on the main track, thus

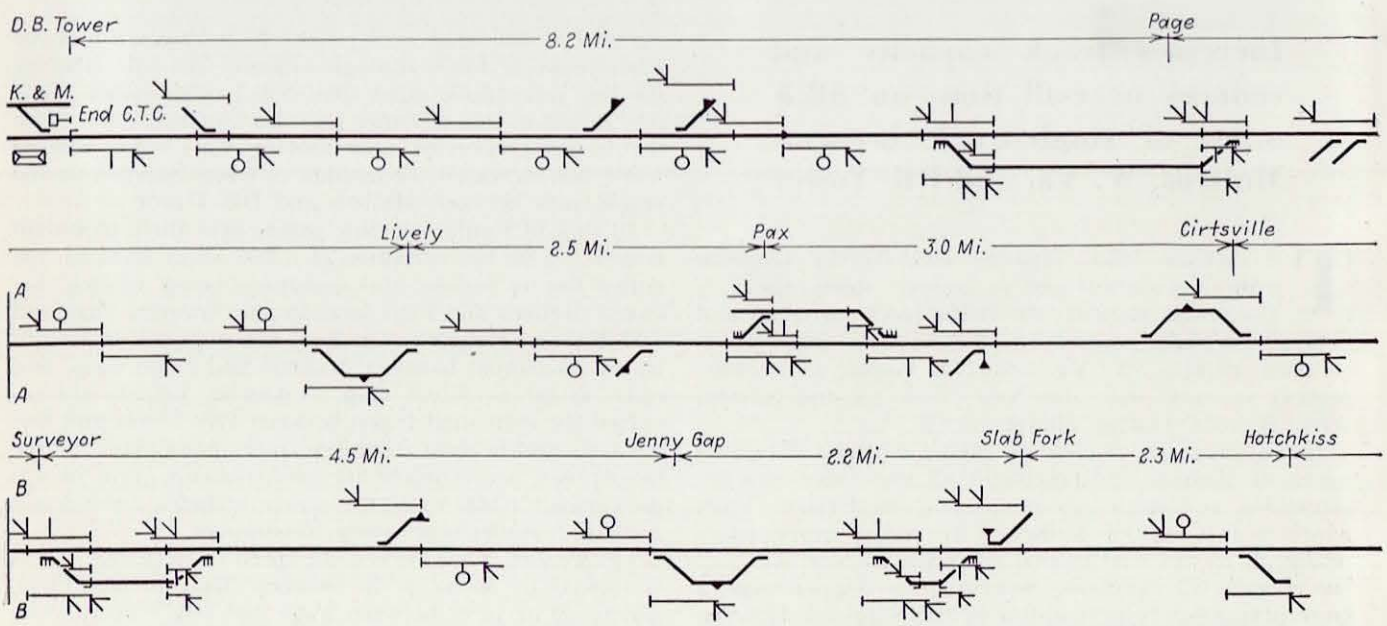


Profile of Line Between DB Tower and Mullens

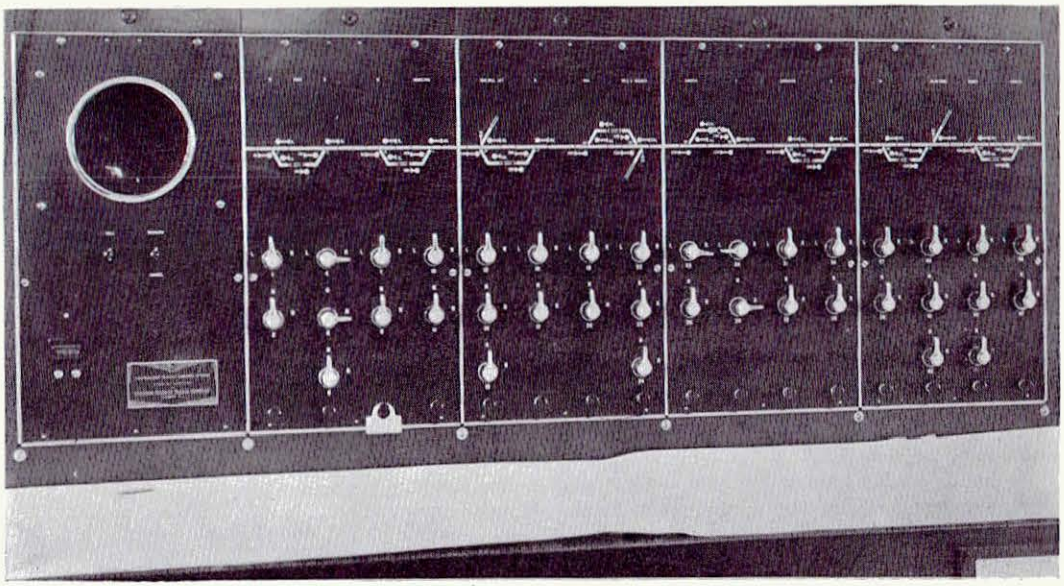
affording protection automatically. In the future, when adequate yard capacity is available at Elmore and other points, these three tracks may be removed entirely.

Power Switches

Power-operated switches and semi-automatic C. T. C. controlled signals are provided at each end of the eight remaining passing tracks, now referred to as controlled sidings, i. e., Maben, Slab Fork, Surveyor, Harper, Pax, Oak Hill Junction, Hamilton and Page. At the east end of Slab Fork, the east end of Pax, and the west end of Oak Hill Junction, branch lines connect with the main track by hand-throw switches within the interlocking limits of the home signals. Each of these switches is equipped with an electric lock controlled by the C. T. C. dispatcher. At the fouling point on each of these turnouts and at certain other turnouts, there is a hand-operated derail which is equipped with a circuit controller connected to shunt the main track when the derail is off the rail. All hand-operated switches in the main line



Plan of the C. T. C. Territory Showing the Locations of



The C. T. C. Control At Mullens Has 16 Levers for Signals And 16 for Switches

are also equipped with circuit controllers for shunting the main track when the switch is opened.

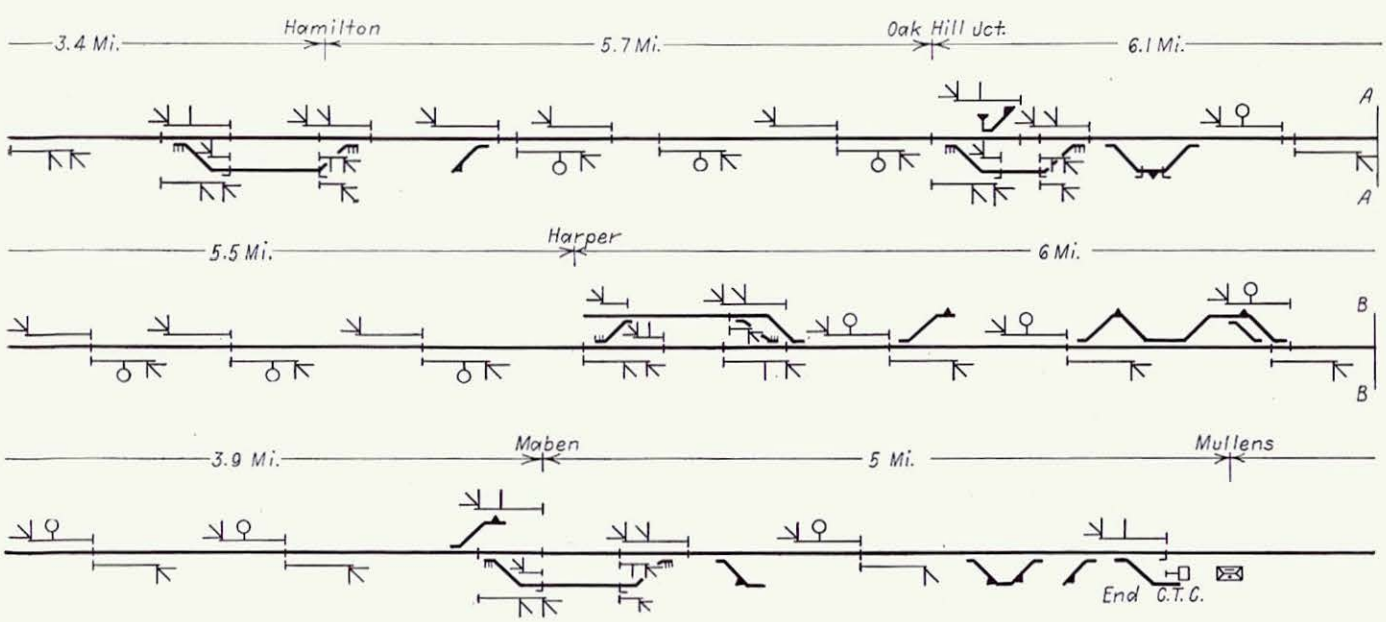
Searchlight Signals

The semi-automatic C. T. C. home signals at the ends of the controlled sidings are designated as such by the absence of number plates. Also, as a further distinction, these signals which apply to the main track each have two units. The station-entering signals and the main-line station-departure signals display green-over-red for Clear, yellow-over-red for Approach, and red-over-red for Stop. When a switch is reversed, the station entering signal is controlled to display the red-over-yellow aspect, giving a train a diverging route indication to enter the siding at restricted speed.

All signals are located at the immediate right of the track governed. Where clearance was not available for a high signal between the main track and the siding, the main-line station-leaving signals are two-unit dwarfs, the lower unit displaying red in combination with red, yellow or green in the upper unit. The siding-leaving signals are single-unit dwarfs, which display red for Stop, yellow for Approach when only the immediate automatic block is unoccupied, and green for Clear when two or more automatic blocks are unoccupied.

A complete arrangement of intermediate automatic block signals is provided to protect and to space following trains as closely as practicable in order to increase track capacity. On account of the numerous curves and mountains, many of the intermediate signals had to be at staggered locations in order to provide sighting distance. Automatic signals controlling trains on ascending grades are equipped with grade markers, which authorize freight trains, when encountering a Stop-and-Proceed aspect, to proceed at restricted speed without stopping at the signals. Half of the 52 automatic signals are equipped with grade markers.

Each of the power-operated switches is equipped with a General Railway Signal Company Model-5D dual-control low-voltage d-c. switch machine of the latest type with the out-board automatic magnetic brake. With 20 volts at the motor, a switch operates in about 9 seconds. Insulated gage plates and adjustable rail braces are used



Signals and Passing Tracks Between DB Tower and Mullens

on three ties, on two of which the plates extend and are attached to the switch machine, thus preventing lost motion.

The C. T. C. control machine, located in a separate 20-ft. by 20-ft. one-story brick building at Mullens, is handled by a dispatcher. The machine has 16 levers to control 49 semi-automatic signals, 16 levers to control 16 single switches, and 3 levers to control electric locks on hand-throw switches. The illuminated track diagram, above the levers, indicates track occupancy, all sections of the main track being included. When a train enters a passing track, the dispatcher places a token in a hole on the line in the diagram representing this track, and this serves as a reminder of the location of the train until it departs, at which time the token is removed.

The control of the power-operated switches and semi-automatic signals from the C. T. C. machine to the field stations, as well as the return of indications to the office, are accomplished by the General Railway Signal Company Type-H, Class-M line coded system, using two line wires from the office at Mullens to the west switch and its associated signals at Page controlled siding. The code equipment has a capacity for operating 32 field stations.

Benefits of the C. T. C.

The track capacity could not be increased by increasing train speeds because of the heavy grades and curvature, as well as the tonnage handled by trains. On account of the low average speed, the track-occupancy time of trains when moving between passing tracks is proportionally higher than would be under more favorable circumstances. Previously, the main line track-occupancy time for a train between two stations was further increased by the time lost when stopping to permit operation of hand-throw switch stands at passing tracks. Even with a well-timed meet, one of these heavy coal trains would lose 20 to 30 min. entering and departing from a siding. On account of the numerous variable factors in train operation on this territory, trains often did not make the progress anticipated by the dispatchers, and, therefore, many of the meets were not at close timing, which further delayed the trains which took siding. The numerous trains and pusher locomotive movements, and also the accumulated overall time between terminals, required each train to make too many meets.

The power-operated switches, under the control of the dispatcher, permit trains to enter or leave passing tracks without being required to stop at switches. Thus, the power-operated switches may save as much as 20 to 25 minutes for a tonnage train making a move out of one siding and into another siding for a second meet. This saving in time in numerous instances permits trains to be advanced one or more sidings, when otherwise, with train orders and hand-throw switches, they would have had to stay in the clear.

By means of the track-occupancy lamps on his diagram, the dispatcher knows the location of and progress being made by each train, and if one train is "falling down," he can advance opposing trains. For example, on November 12, an east-bound tonnage train with two locomotives had been making such excellent time that the enginemen decided that they would be safe in passing up the usual stop for water at Pax, a special advantage being that they could thereby get a run for the grade up to Harper. In anticipation of this possibility, the dispatcher lined the signals for the move and put a westbound freight train in the siding for a meet at Harper. This operation saved approximately 45 min. for the eastbound time freight and did not cause the westbound to lose more than 20 min. In this instance, if the eastbound train had stopped at Pax for water, the dispatcher would soon know this from his diagram. This eastbound freight train made the run from Page to Mullens in 2 hr. 10 min., which is considered a very good record as compared with previous operation under train orders.

On the same date, the dispatcher started a westbound time freight out of Mullens, expecting to put it in the siding at Maben for a meet with an eastbound train. However, the eastbound train had to stop at Lester to set out a car on which a wheel flange was broken. In the meantime, by means of the C. T. C., the dispatcher advanced the westbound train from Maben to Slab Fork, thus saving at least 40 min. for this train. Numerous similar instances occur daily in which the C. T. C. serves to advance trains whereas, under previous methods of train operation, train orders could not have been changed in time to take advantage of such rapidly changing circumstances. In addition to the time savings mentioned above, the intermediate automatic block signals permit following trains to be operated at the closest spacings consistent with safety. With this protection, the enginemen have confidence to proceed at normal speeds whereas, previously, when making following moves, trains had to be operated at very slow speeds in order to be able to stop short of a train ahead, possibly on one of the sharp curves. Thus, with the automatic block signals and C. T. C., a tonnage freight can frequently be advanced behind a passenger train or a time freight, whereas previously the tonnage freight would have been held back.

The Power Switch Machines Are the Dual Control Type

With C. T. C., the helper locomotives, when running light, can be moved back to the starting points promptly, thus saving time that previously was wasted waiting on sidings at the crests of grades. Now helper crews can help three or more trains up a grade during an eight-hour trick, whereas previously the instances in which more than two such moves were made in one trick were rare. As explained by one of the operating officers, the C. T. C. system is an important aid in keeping the trains moving more efficiently and with greater safety in this territory which, on account of the traffic now being handled, would no doubt be congested if the signaling had not been installed.

This centralized traffic control was planned in cooperation with the General Railway Signal Company and installed by the forces of the Virginian Railway under the direction of A. R. Kyle, superintendent of telegraph and signals, and under the supervision of E. Lockhart, assistant superintendent telegraph and signals. The detail circuit plans and the major items of equipment were furnished by the General Railway Signal Company.

Mediation Fails In Non-Op Wage Case

(*Continued from page 248*)

that because the Railway Labor Act requires that an arbitration award be filed in a District court and that judgment shall be entered on the award which is subject to impeachment only on limited grounds defined in the Railway Labor Act, it would be an anomalous situation for a court to enter a judgment for the enforcement of the award, but still have the award subject to the approval of an administrative body such as the National War Labor Board. They further contend that the Labor Panel could be made responsible for carrying out the policies of the anti-inflation act of October 2. It is understood that two executive orders have been prepared for President Roosevelt and will be issued shortly.

When Mr. Cook requested the parties to submit the demands to arbitration, the unions refused to arbitrate any of them. The Eastern railroads likewise refused to arbitrate all demands while the Southeastern and the Western railroads expressed a willingness to arbitrate the wage demands, subject to the anti-inflation act.

Railroads Cannot Arbitrate Closed Shop

The position of the railroads was outlined in a statement issued by the Carriers Joint Conference Committee, reading in part as follows:

"The question of arbitrating the demands of the non-operating railway brotherhoods for a compulsory union membership agreement has been rejected by the Joint Carriers Conference Committees on the ground that such action is illegal, in contravention of the express provision of the Railway Labor Act which states that 'it shall be unlawful for any carrier to interfere in any way with the organization of its employees . . . or to influence or coerce employees in an effort to induce them to join or remain or not to join or remain members of any labor organization.'"

In the present labor controversy, legality of demands and procedure must be determined before the demands can be settled. One point at issue involves the jurisdiction of the National War Labor Board and whether the anti-inflation act of October 2 applies to railroad workers. If this board takes jurisdiction it must, because of a policy established, adjust the wages of railroad workers with a view to curbing inflation. In the "little steel" case, it established a formula in which the increased cost of living was a major factor for determining increases in wages. At the same time if it should take jurisdiction of rail wages, it must adhere to the executive order of October 3, providing for the stabilizing of the national economy, which provides that wages cannot be advanced to a level that is more than 15 per cent above the level of January 1, 1941.

Another demand which is subject to legal interpretation is that of the closed shop. The attorney general, in a letter to the President on December 29, expressed the opinion that the union-maintenance rule sought by the unions is forbidden by the Railway Labor Act. His letter read in part:

"It is unlawful for a carrier subject to the Railway Labor Act 'to influence or coerce employees in an effort to induce them . . . to . . . remain . . . members of any labor organization.' My opinion that the union-maintenance rule cannot legally be included in a collective bargaining agreement is based upon the conclusion that it would obligate the carrier to violate this provision of the Act.

"Action by a carrier to induce its employees to remain members of a union would not fall outside the Act's prohibition merely because it was taken pursuant to a collective bargaining agreement entered into by the carrier with the union duly designated by its employees as their representative. The legislative history of the act shows that the Congress intended to ban action of this kind by a carrier even when such a union desires it. In the House Bill, the prohibition related to carrier assistance to 'company unions' only. In the Senate Bill, which became law, the prohibition related to 'any labor organization.' The Senate rejected an amendment restricting the prohibition to carrier assistance to company unions. In 78 Cong. Rec. 12,402, Senator Dill, who was in charge of the bill, said in opposition to that amendment:

" 'What the committee objected to, and the position I have taken representing the committee, is that if we are, by law, to say that the railroads shall not be permitted to require employees to join a company union the railroads should not, by law, be permitted to compel or require a man to join some other union that the union officials may want him to join. In other words, that is the wording of the text of the House Bill. The House language and the amendment of the Senator from Montana both use the words company union.' (78 Cong. Rec. 12,391.)

"In the National Labor Relations Act, which became law a year after the enactment of the Railway Labor Act, Congress in effect adopted the view that closed shop and union-maintenance agreements should be permitted except in the case of employer-dominated unions. See section 8. But the National Labor Relations Act expressly excludes from its operation persons subject to the Railway Labor Act and Congress has not amended the earlier act to make it conform, in this respect, to the later act."

With the breakdown of the mediation proceedings and the failure to reach an arbitration agreement, the labor organizations were expected to apply for the appointment of an emergency board from the membership of the National Railway Labor Panel which President Roosevelt's executive order of last May created to provide wartime procedures whereby emergency boards would be appointed without the necessity for the taking of a strike vote. Dr. William M. Leiserson, chairman of the panel, said on Wednesday that he had up to that time received no request for the appointment of a board, but he anticipated that it would be coming along any day.

Meanwhile Dr. Leiserson is understood to be still waiting for Economic Stabilization Director Byrnes' reply to his request for a determination with respect to the jurisdiction of the National War Labor Board in railway wage cases. Pending such determination, some applications for the appointment of emergency boards from the panel have not been acted upon; although Dr. Leiserson denied published reports to the effect that this jurisdictional situation had caused him to refuse to appoint a board to investigate a controversy between the Atlantic Coast Line and the Brotherhood of Locomotive Firemen & Enginemen over the employment of so-called "non-promotable firemen."

That dispute finally reached the strike-threat stage with a walk-out set for January 13; but the National Mediation Board is understood to have obtained a stay of the strike order, meanwhile certifying the controversy to the President for appointment of an emergency board under Section 10 of the Railway Labor Act. No Presidential action had been announced as this issue went to press.

Railroads-in-War News

Britain Tightens Up on Long-Haul Trucks

Government takes control of hauls over 60 miles in conservation move

The British government has decided that truck transportation—because of the shortage of rubber and motor fuel—must be regarded as a "supplement to the other forms of transport," not to be used except where other transport agencies cannot do the job. To put an end to needless use of trucks for long-haul transportation, the government has taken over detailed direction of all truck runs for distances over 60 miles—and shippers who want to use trucks for long-hauls now have to do business with the government, showing cause why highway transportation must be used. Government control may, later on, be extended to shorter hauls. The movement of household goods, bulk liquids, abnormal indivisible loads and parcel traffic is excluded from the new arrangement. The "Hauliers' National Traffic Pool" (under which a large number of trucks has been available for emergency government service) will be absorbed under the new set-up.

It is estimated, according to a recent issue of Railway Gazette (London), that about 25,000 vehicles will come under the control system at the outset. These trucks will be grouped into units of approximately 450 vehicles, each under the supervision of a unit controller. Owners of vehicles, the operation of which is thus assumed by the government, will retain their business identities and will continue to maintain their own vehicles and employ their drivers. The government function is to be that of traffic allocation and truck dispatching. Traffic will be allocated and runs assigned to vehicles by the unit controller, in such a manner as to insure maximum economy and efficiency in operation. A special effort will be made to secure maximum loading and return loads.

The country is to be divided into 12 divisions, coinciding with the Civil Defense Regions, to facilitate co-operation with the Regional Transport Commissioners (who are the present truck regulatory authorities). A "divisional road haulage officer" will be appointed for each region. Each division will be divided into areas, each under the supervision of an "area road haulage officer."

As far as practicable, men in charge of both the regional and area divisions will be drawn from the motor carrier industry—but they will be working for the government and not their private employers in their new jobs. Area division heads and unit controllers will be responsible for seeing to it that traffic is not accepted for movement by highway which could reasonably be handled by some other form of transport. The unit controllers will also be responsible for invoicing of traffic carried, on behalf of the Minister of War Transport.

Two separate arrangements have been made to pay the owners for the use of their trucks. Under one plan the government will take over the entire business of a truck operator, and guarantee him net earnings at the average of any two years he chooses between 1935 and 1938—much like the "standard return" arrangement which prevailed with government control of the railroads in the United States in 1918-20. The other arrangement is applied where the government takes over a few of an operator's vehicles, but not his entire business. Under this plan, a fairly elaborate schedule of rates has been worked out—aimed to reimburse the owner fully. In all cases, vehicles will continue to be operated and maintained by the owners.

It is expected that a considerable number of trucks will be laid up, temporarily, under the new arrangement. Indeed, that is one of the purposes of the plan—to assure an adequate supply of trucks when they may be needed to meet emergencies. The Minister of Labor will undertake to find temporary jobs for drivers thus for the time being thrown out of work.

Brown Heads OPA

The Senate on January 18 confirmed President Roosevelt's nomination of former Senator Prentiss M. Brown of Michigan to be administrator of the Office of Price Administration. Mr. Brown assumed office immediately as successor to Leon Henderson.

ODT's Intercity Bus Rules Save 14½ Million Tire-Miles Monthly

Office of Defense Transportation regulations governing intercity bus operations are saving more than 14½ million tire-miles a month, according to a January 18 press release. Tire-miles are computed on the basis of six tires to a bus, and it is estimated that a total reduction of nearly two and one-half million scheduled bus miles monthly has been achieved through the application of General Order ODT No. 11 and 34 special orders.

General Order 11, effective last July 1, froze intercity bus routes and called for the pooling of competitive services and the discontinuance of limited or express service and service to places of amusement. The 34 special orders provided for the execution of coordination plans submitted by operators.

War Traffic's Peak Hasn't Been Reached

"Harsh realities" ahead, says Eastman in call for continued cooperation

Director Eastman of the Office of Defense Transportation does not believe that the wartime peak in freight traffic has yet been reached, while he knows that passenger traffic "has by no means reached its peak." Thus, he told this week's St. Louis, Mo., meeting of the Associated Traffic Clubs of America that there are still in the transportation situation "harsh realities of which we cannot too often be reminded."

The ODT director, noting that such predictions "are current again," took occasion to assert that he has no thought that the railroads will "break down." But he did call for continued and intensified cooperation on the part of all concerned for he thinks "there is some reserve capacity which has not yet been utilized." He mentioned rail lines which have not been used relatively to the same extent as others; further reduction in empty car movement; possibilities for utilizing the full capacity of the inland waterways; elimination of cross-hauling; cooperation of the public in refraining from travel "in the absence of real need"; and opportunities for railroad labor to "relieve manpower and operating conditions by further changes in working rules and restrictions without undue sacrifice."

With respect to the passenger-traffic load, Mr. Eastman said that on both buses and railroads it "threatens to become intolerable," adding that unless public cooperation is forthcoming "it may be necessary to resort to some positive control of travel as the lesser of two evils." He is hopeful and still believes that such control can be avoided, for he is "certain that it would be an evil." However, the ODT director pointed out that troop movements "will continue to increase as our military forces grow in size."

Mr. Eastman recognizes that the "approaching end of war plant construction" may be expected to bring some relief with respect to freight traffic; but "the best forecasts we can make indicate that this relief will be more than offset by traffic gains in other ways."

"I believe," he went on, "that as our military forces become trained and our overseas campaigns develop, and as our shipping facilities grow in quantity and ability to transport, traffic movements to our ports will increase in volume and frequency. These movements may create

(Continued on page 258)

British Women Fill Many Railroad Jobs

Manpower shortage relieved by hiring more than 100,000 for all kinds of work

More than 100,000 women now are employed on the railways of Great Britain, including the London Transport Board operations, out of a total of some 600,000 employees, according to a statement by Dorothy Sells, of the Division of Transport Personnel of the Office of Defense Transportation, issued in Washington last week after her return from a three-month investigation of the employment of women in England to meet manpower shortages in the transportation industry.

While the greater number of women employees are engaged in unskilled and semi-skilled jobs, "a good many" are doing highly skilled work, she said. As a result of the acute manpower shortage, which has led to the development of mechanical lifting devices and to "de-skilling" mechanical operations, women are employed to some extent on heavy work normally requiring great physical strength, or in tasks involving a relatively high degree of mechanical skill, and others are found in such jobs as blowing out boiler tubes, laying rails, steam-cleaning wheels from pits, lifting ashes, and lubricating locomotives.

Miss Sells reported that practically no evidence of opposition to the employment of women was expressed by railroad men in Great Britain. The National Service Act provides that men in the services can return to their former jobs when the war ends, and union agreements provide that women shall get the same pay as men if they do the same work, she pointed out, so that two important possible causes for friction are eliminated. In general, she added, the women look upon their work in the transportation industries as part of the war effort, not as a field for future employment.

Many women have been working as much as 60 hours per week, the ODT investigator reported, but the tendency is to shorten the working week somewhat below this level. On the other hand, in many instances it has been more satisfactory, she said, to employ women on a part-time basis, so that their strength would not be taxed in difficult jobs, and also to permit them to take care of their homes and community obligations without making a bad record for absenteeism.

On the British railroads Miss Sells found very few women in train service work, and these were "guards" on little-used branch lines. On the other hand, they are employed widely in stations and to some extent in shops, she reported. There are a great many women train announcers, check room attendants, baggage porters, and "platform porters" (freight handlers). A few women are stationed in branch line "signal boxes," and a good many work in the shops under male supervision.

While women do as much work as men in certain jobs, Miss Sells said, in many others they do not. For example, three women platform porters do the work of two men. In the shops it is still necessary to have men "set up" the work on many of the machines operated by women. While close supervision of women is frequently required, it very often is possible to employ super-annuated men employees for this purpose, so that able-bodied men are not diverted from productive work.

Perhaps 80 per cent of British women transportation workers are trained on the job, she said, but railroads provide schools to train certain classes of employees, such as ticket sellers and platform porters. Some training courses in mechanical work are provided by railroads, she added, but government training centers, originally set up to train the unemployed before the war began, give most of the formal instruction in this field. In these eight-week courses women are taught fundamental mechanical principles, blueprint reading, safety methods, and other rudimentary topics.

Miss Sells indicated that the ODT program for employing more women in American transportation industries would be revised in spots as a result of her observations in England, and then widely promoted.

I. C. C. Service Order Cancelled

Service Order No. 102 of the Interstate Commerce Commission, the provisions of which were outlined in *Railway Age* of January 16, page 219, was canceled on January 15, after an amended order had been issued the preceding day which, among other changes, moved the effective date of the order to February 1. The order involved the routing of Virginia and West Virginia coal traffic destined to Toledo, Ohio, or points beyond.

Cites Railroads' "Magnificent Contribution" on Oil Transport

The "magnificent contribution of the railroads to the transportation of petroleum products" was brought to the attention of the Senate's Special Committee to Investigate the National Defense Program in the course of its probe of performance under the plan to convert steel barges and construct wooden vessels for the movement of oil on the intracoastal waterways.

The report of the committee (the so-called Truman committee) was highlighted in the Senate on January 14 by Senator Mead, Democrat of New York. It was critical of "unnecessary delay and confusion" in carrying out the barge program; but Senator Mead in closing came through with his tribute to the railroads.

"Let me say a word of high commendation of the employees and the management of our railroads for the splendid response they have made in this emergency," he said. "I think the railroads throughout the United States are doing an excellent job in the handling of every commodity; they are doing a magnificent job. The emergency which confronts us at this time has made us realize how indispensable the railroads are." In thanking the New Yorker for presenting the report, the committee's chairman (Senator Truman, Democrat of Missouri) went on to say "I agree with him entirely."

East Gets More Oil But Less Hard Coal

Eastman encouraged by tank car speed-up, but Summerall demands canal now

While receipts of petroleum products by tank car in the East in the week ended January 9 showed some improvement over recent preceding weeks, Petroleum Administrator Ickes continued to call attention to the critical condition of oil stocks in that area, at the same time warning that the decline in coal shipments into New England reported during the same week is likely to be more pronounced as the full effect of the strike in the anthracite field is reflected in shipments.

In the week ended January 9 tank car shipments of oil and gasoline into the eastern states averaged 822,837 barrels a day, the highest rate reported since October 17, 1942. While this figure represents an increase of 47,129 barrels in the daily average as compared with the preceding week, it does not reflect the movement of kerosene in steel drums handled in box cars, according to the statement from the office of the petroleum administrator. During the week 26,666 tank cars were loaded with oil for the Atlantic coast region, while 5,052 loaded tank cars were delivered in New England.

All-rail anthracite shipments into New England in the week ended January 9 were approximately 27,900 tons less than in the previous week, Mr. Ickes announced, in spite of diversion into the East of anthracite intended for Canadian points and for destinations west of Erie, Pa. This decline in fuel deliveries was met in part, however, by an increase of about 19,470 tons in all-rail bituminous coal shipments into the New England area during the week, which resulted in receipts of about 232,265 tons, the largest weekly total reported since September.

The expected effect of the anthracite miners' strike on coal receipts in later weeks is suggested by the cut of 450,000 tons per week in anthracite production reported by Mr. Ickes to have resulted so far. Bituminous coal producers have been asked to increase the supply of that fuel in the East to allow diversion of 200,000 tons per week to normal anthracite users until the effects of the strike are overcome. Anthracite shipments to Canada and points west of Erie were halted in view of the fact that stocks on hand in those regions are considered adequate, but Mr. Ickes pointed out that this is a temporary measure subject to change if weather conditions or local shortages make it necessary. For the present, however, he estimates that as much as 120,000 tons of anthracite per week will be diverted into New England by this emergency action.

ODT Director Eastman, in commenting on the achievement of the railroads in delivering better than 822,000 barrels of oil daily to the East Coast "in the dead of winter," indicated that it provides new hope that the 900,000 barrels a day record sought

by the ODT will be attained. His statement indicated a belief that ODT measures intended to speed tank car movement are beginning to show some effect in the weekly reports of deliveries. Symbol train movements, both of loaded and empty tank cars, are going faster, Mr. Eastman pointed out, due to renewed efforts made by the railroads following the Washington, D. C., meeting on December 29, as well as to the seasonal declines in other traffic that have reduced problems of operation, and perhaps to more favorable weather.

While Congressional interest in the oil movement was not immediately expressed in further committee hearings, it did lead to a statement in the House January 18 by Representative Rankin, Democrat of Mississippi, amplified by an extension of remarks in the Congressional Record, that there would be "ample oil" on the eastern seaboard if the Florida barge canal law "had been put into operation." Mr. Rankin inserted into the Record a letter to Governor Saltonstall of Massachusetts from General Summerall, former chief of staff of the Army and now chairman of the Florida Ship Canal Authority, in which the same argument was advanced.

"It is admitted by all," wrote General Summerall, "that if this completed waterway were now in existence, there would be no petroleum shortage in the East; no looming shadow of food and other vital supply shortages beginning to materialize; and no breaking down of our rail transport.

"The situation for the present winter is past mending, and is only a foretaste of the next. But it is possible, by immediate, energetic action, to fully solve the problem of next winter."

Large-scale inland barge transport through a system of coastal waterways completed by construction of the Florida barge canal would "fully and permanently" relieve the oil shortage in the East "within 10 months," the letter asserted. Though construction of the canal has been approved by Congress, the writer continued, "it has been definitely opposed and retarded by those agencies whose duty it is to provide fuel and transport for the nation."

Kanzler Quits WPB

Ernest Kanzler has resigned from the position of director general for operations of the War Production Board, and has been succeeded by Curtis E. Calder, president of the American Foreign Power Co., who has been assistant director since last November.

Buses Have Manpower Problems

The inter-city bus industry's most pressing manpower problem is the shortage of drivers and unskilled labor, according to Otto S. Beyer, director of the Office of Defense Transportation's Division of Transport Personnel. Mr. Beyer's comment was based on a recent survey of labor requirements in the industry conducted by the United States Employment Service.

The survey covered 73 companies representing 65 per cent of the industry. It indicated that prospective requirements will bring total employment to 48,109 by next November as compared with 45,670 in November, 1942. The reporting companies anticipated the employment of 2,699 workers to fill new jobs during the next six months. Noting an increase in the employment of women, the ODT statement said that "one company expects that within a year 60 per cent of its drivers will be women." Also reported were "slight increases in the employment of Negroes."

O. K. To Repair Leased Equipment

By Interpretation No. 1 of Preference Rating Order P-88, the War Production Board's Director General for Operations Kanzler has clarified the authority of railroads to make repairs to leased equipment regularly in operation on their lines without obtaining special WPB authorization.

Rationing for Diners

Finishing touches are now being applied by the Office of Price Administration to a rationing program which is expected to "provide a fair share of scarce food commodities" to such institutional users as railroad dining cars, hotels and restaurants. In developing the program, OPA conferred last week with industry representatives, including the Association of Dining Car Superintendents.

Generally the program will be based on the December, 1942, consumption of the commodities to be rationed and the number of persons served in that month. It contemplates, however, that increases in allotments will be granted to applicants whose business is on the uptrend; and no limit will be placed on the number of persons served. Patrons will not be required to surrender ration stamps in order to be served.

Short Line Manpower Committee

The American Short Line Railroad Association has appointed a committee on manpower to serve in a liaison capacity with the Division of Transport Personnel, Office of Defense Transportation. Members of the committee are J. H. Huntt, secretary-treasurer of the Association (chairman), G. E. McClellan, vice-president, Bellefonte Central, and W. M. Dutton, vice-president and general manager, Mississippi Export.

New Eastman Appeal on Travel Goes to Government Agencies

Asserting that "government leadership in a campaign to eliminate all unnecessary travel will be most helpful to the carriers in their war effort and also to the agencies themselves," Director Eastman of the Office of Defense Transportation has again sought the cooperation of all government agencies. The new appeal came in a January 13 letter.

It made three specific requests as follows: (1) Scheduling of annual leaves of government employees, between January 15 and December 15, 1943, so as to begin and end in the middle of the week and avoid holiday periods; (2) reduction of government business travel to a minimum; and

* * *

Chinese Military Leaders Visit Baldwin

Lieut. General Hsiung Shih-fei, third from left, head of the Chinese Military Mission in Washington, visited the Baldwin plant recently. With General Shih-fei, left to right, Captain Zeit Wang, Major General Bekung Hsu, Mr. Saw-Ching Pong and Dr. Tzyh-Shin Wang.

(3) careful evaluation by agency heads of all requests for speakers at conventions, trade shows, and sales meetings, with restriction of federal representation to only the most essential of such gatherings.

Mr. Eastman stated that ODT's travel curtailment program "cannot be completely carried out without the help of all government agencies," and recalled that "during December, with the help of the government agencies and the significant response of the public, much unnecessary travel over the holiday period was eliminated, and the carriers were well able to accomplish their primary job of transporting the highly essential war traffic."

Aide to Ickes

Fred A. Dawson, superintendent of the New York Central's Cincinnati (Ohio) Terminal Division, has been appointed associate deputy coordinator of the Office of Solid Fuels Coordinator for War. Mr. Dawson, according to the announcement from Coordinator Ickes, will have charge of the transportation aspects of solid fuel problems; he was selected "because of his long experience in railroad freight movements, particularly in the handling of coal shipments."

Would Give Service Men Furlough Travel Certificates

Noncommissioned officers and enlisted men on leave would get "furlough certificates" entitling them to travel to and from their homes at government expense under a bill—S.343—which has been introduced in the Senate by Senator Murray, Democrat of Montana. No service man would qualify for a certificate more often than once every six months; and the carrier collecting the certificate would be paid for the service on the basis of "such rates as shall have been agreed upon by the Secretary of War and the said carrier."

Railroads Make Available for War 100 Million Ft. of Rail

A total of 76,963,843 lin. ft. of rail suitable for relaying rail was allocated by the War Production Board for release by railroads of the United States for use in newly laid tracks during the period from April 22, 1942, to December 31, according to B. C. Bertram, director, Railroad Unit, Conservation Division. April 22 was the date when Order L-88 became effective, requiring railroads to release old rail in exchange for new rail and making the disposal of all old rail subject to WPB order, except rail to be used by railroads in existing tracks.

Of the total relay rail allocated during the period, 29,753,273 ft. went to the Army, 11,845,136 ft. to the Navy, 3,645,020 ft. to the Maritime Commission, and 31,725,414 ft. was allocated for miscellaneous uses, consisting chiefly of new industry tracks laid by railroads and extensions of railroad tracks. Complete records of the relay rail released by railroads prior to the control period are lacking, but from the allocations since April 22, the Conservation Division of WPB surmises that the railroads probably released in the neighborhood of 100,000,000 lin. ft. of relay rail last year, instead of approximately 85,000,000 lin. ft. as previously predicted.

ODT Renews Call for Report on Idle Highway Equipment

Owners of trucks, buses and other commercial motor vehicles—not including taxicabs and automobiles for hire—are reminded by the Office of Defense Transportation that a report is required within 5 days after the last day of each month listing all such vehicles which were idle during the last 14 days of the month. The report is required only from owners who had one or more pieces of equipment idle. Eight-question Form CWN-3 must be filled out in making the report. The purpose of the report, the ODT says, is to determine how many trucks and buses are not in use and might be available for essential transportation.

Bill to Extend Requisitioning Act Favorably Reported

The Senate committee on military affairs has reported favorably S.217, the bill to extend for one year, from June 30, 1943, to June 30, 1944, the act authorizing the President to requisition property "required for the defense of the United States." The report reprinted a letter Committee Chairman Reynolds, Democrat of North Carolina, had received from Secretary of War Stimson who said, among other things, that "the power has been exercised frequently, particularly in obtaining railroad rails and other property for the war effort, where negotiations for acquisition by purchase have been unsuccessful."

Lake Shipping in 1942

What the press release called "the final 1942 score in the Great Lakes shippers' private war against the axis" was posted by the Office of Defense Transportation on January 14. It shows that a total of 178,577,828 net tons moved on the lakes last year, as compared with 169,020,975 in 1941, and 142,874,985 in 1940.

The previously-announced iron ore movement of 92,076,781 gross tons (103,125,995 net tons) was cited as the "outstanding feature" of the season by A. T. Wood, director of ODT's Great Lakes Carriers Division. Attention was also called to the fact that the figures do not include lake movements of petroleum products or coal loaded into vessels at Lake Ontario ports.

Must Use More Bessemer Steel

Railroads and builders of locomotives, freight and passenger cars and equipment specialties were notified in a circular dated January 7, and issued January 18 by the Transportation Equipment Division of the War Production Board, that all orders placed by them following that date for certain items of steel for railroad equipment which have usually been made of open-hearth steel, must clearly allow the substitution of Bessemer steel as an alternative in filling the order.

The new rules, which were invoked to reduce the demand for open-hearth steel, by increasing the utilization of the bessemer process of making steel, extend to 66 items of materials, and further require that all flanging must be formed by the hot rather than by the cold process. The items of material embraced in the order and the instructions governing their purchase, as announced by WPB, are as follows:

To All Railroads, Locomotive Builders, Car Builders and Specialty Manufacturers:

In order to reduce the demand for open-hearth steel for new equipment and repairs, it is requested that, when ordering steel, the purchase order shall specify "either open-hearth or bessemer steel."

1. On flat rolled plates under 7/16-in. thick and structural shapes, when not subject to high stresses, dynamic shocks, severe forming, or cold flanging.

2. Also on items listed below:

Freight Cars	Passenger Cars
Diaphragm web plates except bolster and crossbearer	Diaphragm web plates except bolster and crossbearer
Diagonal braces	Side sheets
Center sill separators	Roof sheets
Floor stringer connections	Corner caps
Floor beams	Branch pipe supports
Door headers	Diagonal brace gussets
Hood sheets	Reservoir supports
Inside finish	Unflanged side sheets
Side doors	Unflanged slope sheets
False floor sheets	

Locomotives

Deflecting plates	Ash pan material
Ex. inj. water reg. rigging	For stoker manifold shield
Booster air manifold bracket	Dome finish body
Door shield s. box ft.	Sand box body
Steam pipe cover	F. bumper step splash plate
Exh. inj. separator support	F. bumper step back plate
Cylinder jacket	Boiler jacket material
Oil pipe bracket	Gage stand (air gage booster and valve pilot)
Mech. lub. oil pipe brackets	Gage stand (stoker and ex. inj.)
Driv. box oil pocket	Gage stand (pyrometer)
Cen. pin. lub. on front foot plate	Valve handle support
Draw pin cover	Cab apron
Frame chafing plate	Cab seat details
Cab bracket	Cab material plates
Tank coal grate plates	Running board plates
Ten frame washout	Running board step
Bumper step kick plate	Engineer's tool box plates
B. bumper step plate splash	Side sheet
Tend. stoker material	Cab vent shaft support
Tank stoker compt. door	Cab seat plate (engineer)
Marker lamp box	Cab drop seat plate
Trainman's cab mat'l	Trailer truck box oil cavity
Trainman's cab drop seat mat'l	Staybolt flexible sleeves unless drop forged
Radial buffer shield	

For such of the above named parts that require flanging, hot flanging only is permitted and the flanged parts must be carefully inspected to see that no defects appear in the flanged corners.

WPB Asks Chemical Firms To Cut Use of Tank Cars

Producers, shippers and distributors of a variety of chemicals and related products have been "requested" by the War Production Board to "arrange for such common use of tank cars" as will effect the "most efficient utilization thereof." Announcement of this action, which appeared in the form of WPB Transportation Request No. 1, was accompanied by a certificate signed by WPB Chairman Donald Nelson, addressed to the United States Attorney General, that compliance with the request "is requisite to the prosecution of the war."

The "request" indicates that compliance is expected to reduce the current demand for tank cars and so contribute to relieving the acute shortage of this type of equipment. Pooling of facilities and products, "tolling," and other emergency commercial practices are by implication suggested in the WPB publication, which calls for "such purchases, sales, exchanges, or loans" of the affected commodities as may be required to make it effective. The right to review

agreements and arrangements adopted to meet this request is reserved to the WPB director general for operations, so that all firms subject to it may "share equitably in the available supply and use of tank cars."

Commodities listed in the request include 38 classifications of chemicals and related products, among others linseed oil, lard, coal tar and tar distillates, chlorine, caustic potash and caustic soda, molasses, peanut oil, various alcohols and acids, road tar, petroleum solvents, corn syrup and corn oil, soyabean oil, peanut oil, carbon tetrachloride, castor oil, aniline, cottonseed oil, ammonia solutions, phenol, tallow, sodium silicate, calcium chloride, and a number of synthetic chemicals.

Emergency Specifications for Tie Plates

The American Railway Engineering Association has adopted emergency specifications for Soft and Medium Steel Tie Plates to supersede, for the duration of the war, specifications for Medium-Carbon Steel Tie Plates adopted at the convention last March and superseding also the specifications for Medium-Carbon Steel Tie Plates that were adopted on March 19, 1942. The Association has also adopted as its Specifications for Buildings for Railway Purposes during the emergency the National Emergency Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings that have been prepared by the War Production Board. The Association has also revised its Specifications for Membrane Waterproofing, for the duration, to waive the requirement for ductility at 77 deg. F.

War Traffic's Peak Hasn't Been Reached

(*Continued from page 254*)

rather serious transportation problems, particularly in the Pacific Coast area, where the railroads were not designed for any such traffic flow.

"The manpower shortage, continually becoming more acute, will have adverse effects on transportation. The direct effect will be felt, I think, soonest and most severely by the highway automotive vehicles, but the railroads will not escape. The railroads will also suffer indirectly from the effect on the other carriers and likewise from the inability of industries to retain labor able to load and unload freight quickly and well.

"The most serious danger facing the railroads probably lies in the rubber shortage. No one can yet be sure about the future rubber supply or about the dimensions, in time or amount, of the shortage for other than military purposes. These conditions may, sooner than we expect, cause a reduction of truck and bus operations which will throw a heavy burden upon the railroads.

"Finally, the hazards and necessities of war are incalculable. The severest strains which our transportation system is now enduring are from that source, and no one can be sure that there will not be others, wholly unforeseen."

Earlier in the address, the ODT director had suggested that "there are few greater faults than wishful thinking," adding that "certainly we ought to base all our assumptions and planning on the theory that it will be a long war and a very hard one; and I, for one, believe that it will be." Also, he paid his usual tributes to the railroads and other transportation agencies, shippers, transportation labor, and the ODT staff. His references to labor mentioned "a few minor but troublesome strikes," and the fact that there "is still insistence on some rules and restrictions which are inconsistent with all-out war effort." At the same time, Mr. Eastman added, "it is also true that rules and restrictions, highly prized and cherished, have been relaxed in many instances.

C. P. R. Pictures Its Work for Victory

The C. P. R. has issued a 16-page illustrated booklet, entitled "The Canadian Pacific at War—on Land, on Sea, and in the Air," reviewing its activities in connection with the war effort.

Pictures are used in most cases to convey to the reader the extent of the road's participation. The number of C. P. R. employees now in the armed forces, the contribution made by its Angus and Ogden shops in the production of tanks and naval guns for the United Nations, and the huge troop movements handled, are among the subjects treated.

The efficient packing and handling of freight and the part played by the C. P. R.'s steamships and air lines in handling war traffic are pictured. Data are also given regarding the "air colleges" operated by the road in cooperation with the British Commonwealth Air Training Plan. Women now employed to replace men in the armed forces also receive due credit.

Enginemen in Britain Threaten Walk-Out over Wages

Union representatives of the locomotive engineers and firemen on the British railways have decided to appeal their case for a wage increase to the Minister of Labor—having voted by a narrow margin to hold strike action in abeyance, meantime, for a period of 21 days, as is provided by law to assure amicable settlement of such disputes.

There are three major unions on the British railways. The largest, the National Union of Railwaymen, is an industry-wide organization, soliciting members in all occupations. In addition there are two craft unions—the Railway Clerks' Association and the Associated Society of Locomotive Engineers and Firemen, which last-named organization is the one concerned in the current controversy. The N. U. R. represents about 64 per cent of the employees, the Clerks' organization 14 per cent and the A. S. L. E. & F. 10 per cent.

All three unions sought higher wages last year, and modest increases were awarded by the Railway Staff Tribunal—giving rise to complications because of the resulting change in ratios of pay between various occupations. The complaint of the A. S. L. E. & F. appears to stem, among other causes, from the fact that aggregate wage increases have been made largely on a flat basis of two or three dollars a week for practically all classes of employees. Thus the percentage increase to enginemen—since they are among the highest-paid employees—has been relatively less than that of lower-paid occupations, and has resulted in a smaller "spread" than that which formerly existed between their wages and those of lower-paid occupations.

General Young Becomes Deputy Director of ODT

Brigadier General Charles D. Young was appointed deputy director of the Office of Defense Transportation under a January 16 directive issued by Director Eastman. The directive stipulated that, in the absence of the director from Washington, General Young "may act for him on matters requiring immediate attention."

Also, he will "advise and assist the Director and subject to him will have direction and control in all matters pertaining to the responsibilities of this office as a claimant agency in the War Production Board;" and "assist the Director and perform such other duties as may be assigned to him."

General Young, a former vice-president of the Pennsylvania, has been assistant director of ODT since his retirement from active army service last June. Prior to that tour of duty he was director of ODT's section of materials and equipment, predecessor to the present division of material and equipment requirements. A photograph of General Young and a sketch of his career appeared in the *Railway Age* of January 17, 1942, pages 214 and 217.

ODT Plan to Mobilize Motor Vehicles in Emergencies

Plans to mobilize commercial motor vehicles to augment facilities of local Civilian Defense Councils in the event of war emergency or public disaster have been announced by Director Eastman of the Office of Defense Transportation. The plans to be put into operation in the "critical" areas of the Atlantic, Gulf and Pacific coasts and in the Great Lakes region, were worked out in collaboration with the Office of Civilian Defense.

Eighty-nine of ODT's 142 field offices are included in these areas, and the initial organization "will probably call for the mobilization of 50,000 buses and trucks." The ODT, as the press release put it "has emphasized that the new mobilization program must not interfere with local vehicles mobilized by OCD for local emergency needs." Thus it is assumed that these local arrangements will in most cases be adequate; but "ODT machinery must 'stand by' and be fully prepared to swing into action when needed."

GENERAL NEWS

States Keep Power Despite Labor Act

Supreme Court upholds their authority to regulate working conditions

Congress in passing the Railway Labor Act did not preempt the field of regulating working conditions on railroads, the United States Supreme Court has decided, and the states retain police power to require railroads to take actions considered necessary for the safety of employees. The court's opinion, in the case known as *Terminal Railroad Association of St. Louis versus Brotherhood of Railroad Trainmen,* was announced January 18 by Justice Jackson.

The case grew out of an operating practice of the railroad concerned, in which trains engaged in switching and transfer work in its yards and on its lines in East St. Louis, Ill., were not provided with cabooses. In a complaint to the Illinois Commerce Commission the union alleged that one man of each train crew was required to ride the rear car of each train in motion and to be prepared in emergency to stop the train by opening an air valve next to the drawbar, which requirements, it said, endangered the employee's health and safety. The state commission was asked to, and did, order the railroad to provide cabooses on its trains operated within the state, so that trainmen would not be required to ride the tops, sides or ends of freight cars to carry out these duties.

The railroad's counsel contended before the state commission that all reasonably necessary facilities were already provided, and argued that the commission had no authority to enter any order concerning movements in interstate commerce, which included substantially all the road's operations. On appeal from the commission's order, the Illinois Supreme Court found that the order was issued "to protect the lives and health of citizens of this state" engaged in the railroad's business within the state, and that it did not impose an unlawful burden on interstate commerce. The case then was taken to the United States Supreme Court on appeal, and the lower court's decision was upheld.

It was argued before the Supreme Court that Congress, in passing the Boiler Inspection Act, Safety Appliance Act, Interstate Commerce Act, and Railway Labor Act, had occupied the field of regulation concerning the situation involved, leaving the state without authority to require the railroad to attach cabooses to its trains. The court's opinion cited precedents for its conclusion that while the three laws first named give appropriate federal agencies certain power in such circumstances they do not preclude the state from acting where such power is not used.

The effect of the Railway Labor Act on the powers of state regulatory agencies in such circumstances had not heretofore been examined by the Supreme Court, Justice Jackson's opinion added. That act, he pointed out, provides machinery by which agreements can be reached between railroads and their employees as to safe working conditions, among other subjects, but it does not undertake governmental regulation of working conditions. "So far as the act itself is concerned these conditions may be as bad as the employees will tolerate or be made as good as they can bargain for," said the court. The federal interest in such matters is to see that disagreements about working conditions do not interfere with interstate commerce, the opinion added.

State laws, on the other hand, have long regulated a great variety of working conditions in transportation and industry, said the court, and the question of state power in this case must be decided in the absence of a conflicting act of Congress or an exclusive occupation of this field of regulation by federal authority. On that basis, the authority of the state commission to require the railroad to attach cabooses to its trains was upheld.

Because practically all of the shipments moved in the road's trains are in interstate commerce, and because many of the trains actually cross a state line into St. Louis, Mo., in the course of regular operation, the order of the state commission does in some measure "retard and increase the cost of movements in interstate commerce," the court decided. There are many cases, however, it added, "where the court has sustained a wide variety of state regulations of railroad trains moving in interstate commerce having such effect," so the order in question is not considered invalid on that ground.

Telegraph Merger Bill Reported

The Senate committee on interstate commerce has reported favorably S.158, the bill to amend the Communications Act of 1934 to permit consolidations and mergers of domestic telegraph carriers.

Pipe Line Bill

Representative Curley, Democrat of Massachusetts, has introduced H.R. 1212, which would authorize the President "to provide for the immediate construction of an oil pipe line from the Gulf Coast of Texas to the New York-Philadelphia area of sufficient capacity to supply the oil requirements of the Eastern seaboard."

Estimate 8 Per Cent Drop in Carloadings

Atlantic Shippers Board told 5 per cent efficiency gain required of railroads

Members of the Atlantic States Shippers Advisory Board at the 19th annual and 60th regular meeting at New York on January 13-14 were presented with estimates by the organization's commodity committees that carloadings in territory covered by the board will be 8.5 per cent less in the first quarter of this year than the actual loadings in the corresponding period of 1942. The largest decrease (90 per cent) was set forth for loadings of petroleum and petroleum products, which it is expected will drop from 51,608 carloads to 5,161. Other large decreases forecast included a drop of 69 per cent in loadings of sugar, syrup and molasses, 20.7 per cent for cement and 24 per cent for canned goods, including all canned food products. Largest percentage increase was expected for fresh vegetables, other than potatoes. No estimate was presented for the automobile, truck and parts industry due to its conversion to production of war materials. For l. c. l., the tonnage to be shipped in the first quarter of 1943 was estimated at 728,020, which compares with actual shipments of 707,502 in the first quarter of 1942, or a gain of 2.9 per cent.

In his opening remarks calling the meeting to order, Clare J. Goodyear, traffic manager of the Philadelphia & Reading Coal & Iron Co., and retiring general chairman of the Atlantic States Shippers Advisory Board, declared that the current war involved a transportation job greater than any heretofore faced by man and called upon the members to conduct their affairs scrupulously along the rules of car efficiency and to aid in educating the public generally of the necessity for the efficient use of railroad equipment.

M. J. Gormley, of Washington, D. C., executive assistant of the Association of American Railroads, told the board that between 125 and 150 trains carrying troops and their equipment are started on their way each day and revealed that at least 1,500 locomotives are now being used entirely for the movement of oil to the east. One of the reasons why the railroads are handling the record-breaking traffic so satisfactorily, he explained, is that they have been getting greater use out of their serviceable equipment. "For the first ten months of 1942," he said, "the railroads made an average of 49 miles per car per day, which is approximately 62 per cent higher than the goal set in the railroads'

improvement program adopted in 1923. The tons per car in the first ten months of 1942 averaged a little more than 40, an increase of 34 per cent above 1923." Even so, Mr. Gormley stated, the railroads will have to do at least five per cent better during the coming year if they are to handle the expected increase in traffic.

Mr. Gormley disclosed that a total of slightly less than 20,000 loads of export freight is now being held at all Atlantic, Pacific and Gulf ports, "possibly a little in excess of what it ought to be at some of the ports in the western territory, but not alarming in any respect."

"With approximately three billion dollars' worth of construction going on all the time," he concluded, "we have an overall record of cars being unloaded at these projects with an average of less than two days' delay. All this is due to advance planning and a thorough understanding on the part of the Army, the Navy and the contractors that cars must not be loaded unless it is known in advance that they can be unloaded promptly on arrival at destination."

Addressing a joint luncheon of the Atlantic States Shippers Advisory Board and

Charles H. Vayo

the Traffic Club of New York, John M. Fitzgerald, vice-chairman, Eastern Railroad Presidents Conference Committee on Public Relations, stated that the record-breaking traffic of today is being handled with 22,000 fewer locomotives and 500,000 less cars than were operated in 1918, which demonstrates a more intensive use of railroad plant and equipment than ever before achieved, and that this plant can so continue to operate only if the property is kept in good condition. "This means the necessary materials and supplies for the maintenance of locomotives, cars, roadway and structures. It means new equipment for the larger job ahead."

Noting that there is now a popular idea that the railroads are too prosperous, he declared that people forget that "the railroad share of prosperity has always been too little—and most of the time, it has come too late for the public good." A year ago, the Interstate Commerce Commission authorized an increase in railroad rates, he said, to enable the carriers to meet a substantial wage increase and higher costs of fuel, materials and supplies. "Had the increased rates and fares been in effect during the whole of 1942, they would have added about $357,000,000 to the revenues of Class I carriers. For the same year, the wage increase cost the roads $397,000,000; and the additional cost of fuel, materials and supplies totaled about $110,000,000."

Furthermore, he added, the railroads have already made voluntary reductions in rates in order to ease critical situations created by the war, and as a direct aid to the war effort itself. The reduction in rates on oil to the east coast alone, aggregates $158,000,000 annually on the basis of the present movement. In addition, reductions in fares for men in uniform traveling on furlough, now amount to about $70,000,000 annually. Nevertheless, he said, the I. C. C. has been requested to cancel the rate increases.

Railroad charges, he continued, are a relatively small proportion of the cost of war munitions, equipment and supplies and, moreover, the great bulk of government traffic generally moves on "land grant" rates, which rate deductions are now running at about $100,000,000 annually. Present railroad earnings, he declared, result from traffic volume and efficient operation and not excessive rates. The proposal to reduce railroad rates does not suggest similar reductions in wage rates and the cost of fuel materials and supplies, he charged, noting that the government's policy generally was to stabilize prices and wages as of September 15, 1942, at which time the current rates were in effect.

The speaker said that the wage demands of the non-operating groups would cost the carriers $450,000,000 annually and that similar demands from operating groups are in the offing, which would add another $200,000,000. Granting of this increase to the non-operating groups would mean an increase of 48 per cent in the average hourly rate paid in 1941. Moreover, reduced rates and increased wages will prevent the railroads from accumulating reserves for plant replacements after the war. He pointed out that the roads are spending large sums for special facilities to aid the war effort for which there will be little or no use after the war, and that they are not asking for government subsidy or preferred treatment and are not seeking special grants for the construction of war facilities.

Other speakers at the meeting of the shipper organization included O. C. Castle, of Washington, D. C., associate director of the Division of Railway Transport of the Office of Defense Transportation; R. W. Brown, of New York, president of the Lehigh Valley; H. M. Frazer, also of New York, traffic manager of the F. W. Woolworth Company; and A. P. Stevens, district manager of the car service division of the Association of American Railroads. Mr. Castle predicted that ODT order No. 18 governing maximum loading of freight cars would be revised and probably liberalized. A special feature of the board meeting this year was a round-table discussion over the radio on January 13 by railroad and shipper representatives, emphasizing the part they are playing in winning the war.

The following officers were elected by the board: General chairman, Charles H. Vayo, general traffic manager of the Eastman Kodak Company, Rochester, N. Y.; first alternate general chairman, C. J. Fagg, president of the Newark Central Warehouse Company, Newark, N. J.; second alternate general chairman, Ralph C. Huntington, secretary of Casey Jones, Inc., Baltimore, Md.; general secretary, Charles R. Seal, traffic director of the Baltimore Association of Commerce, Baltimore; and secretary, F. J. Murphy, of the Car Service division of the Association of American Railroads, New York.

Passes of Water Carriers

The Interstate Commerce Commission, Division 1, has issued an order applying to common carrier by water its regulations governing the forms and recording of passes. The order becomes effective February 15.

Asks $40,000,000 for Roads

President Roosevelt has transmitted to Congress a request for a supplemental appropriation of $40,000,000 for the Federal Works Agency, the money to be used for the construction of access roads to defense projects during the current year ending June 30, 1943.

Annual Meeting Northwest Board to be at St. Paul

The Northwest Shippers Advisory Board will hold its twentieth annual and sixty-fourth regular meeting at St. Paul, Minn., on January 26. At a joint luncheon with the St. Paul Association of Commerce, Henry F. McCarthy, director of the Division of Traffic of the Office of Defense Transportation, will speak on Transportation Plans of the Office of Defense Transportation for 1943.

ODT Appointment

Horace M. Wigney, chief of the Refrigerator Car Section, Division of Railway Transport, Office of Defense Transportation, has been appointed assistant director of the Division, in charge of perishable freight service. The announcement states that Mr. Wigney, in addition to handling matters relating to railroad refrigeration service, will "cooperate with the Division of Traffic Movement in administration of General Order ODT 18, as it concerns perishable products."

Intrastate Rates in Utah

The Interstate Commerce Commission in a report by Commissioner Porter has found that unjust discrimination against interstate commerce results from the refusal of the Public Service Commission of Utah to permit railroads serving that state to apply the Ex Parte 148 increases to their intrastate rates on cooking coal and coke. At the same time it is found that no unjust discrimination results from the Utah commission's refusal to permit the increases

in intrastate rates on sugar beets, sugar-beet molasses, limerock, beet pulp, and ores and concentrates of value not exceeding $25 per ton of 2,000 lb.

The decision, in No. 28848, states that an order will be entered unless the Utah commission notifies the I. C. C. on or before February 25 that it will permit promptly the increases on cooking coal and coke. The dissent of Commissioner Johnson was noted, while Commissioner Mahaffie did not participate in the disposition of the case.

Western Railway Club Announces Purchases and Stores Night

A. C. Mann, vice-president of the Illinois Central System, will address the Western Railway Club at its meeting on Monday evening, February 1, on "Oats for the Iron Horse," following which E. A. Clifford, general purchasing agent of the C. & N. W., D. C. Curtis, chief purchasing officer of the C. M. St. P. & P., A. N. Crenshaw, purchasing agent of the G. N., and R. D. Long, general purchasing agent of the C. B. & Q., will lead the discussion.

Burlington Gets I. C. C. Order To Signal 13.5 Miles

An order of the Interstate Commerce Commission by Commissioner Patterson requires the Chicago, Burlington & Quincy to install an automatic block signal system on that part of its Alliance division between Belmont, Neb., and Crawford, 13.5 miles. This order makes effective a proposal of the road to make that installation, following a show-cause order of the commission, dated September 9, 1942, which called for a block signal installation from Alliance, Neb., to Edgemont, S. D., about 110 miles.

Pointing out that the section to be equipped with automatic signals under the terms of this order embraces a helper district on which train and engine movements are more frequent than on other parts of the line specified in the show-cause order, the commission indicates that it will hold in abeyance its proposed requirement for signal installations on the rest of the line.

Hobson Promoted by ODT

Effective January 1, Harold A. Hobson has been made associate director in the Division of Railway Transport of the Office of Defense Transportation, succeeding Harry G. Brandt, who has resigned to return to the Atchison, Topeka & Santa Fe. Mr. Hobson, formerly a deputy associate director, will be in charge of rail-truck co-ordination in the Western region, with headquarters at Chicago. Before joining the ODT in June, 1942, he was assistant to the general superintendent of the Pennsylvania at Cleveland, Ohio.

November Locomotive Shipments

November, 1942, shipments of railroad locomotives totaled 121 as compared with 177 in October, 1942, and 89 in November, 1941, according to reports made by builders to the Department of Commerce's Bureau of the Census. Shipments during last year's first 11 months totaled 1,453 locomotives, including 652 steam, 13 electrics, 715 Diesel-electrics, and 73 of other types, as compared with 1941's 11-months shipments of 874, including 160 steam, 17 electrics, 645 Diesel-electrics, and 52 of other types.

Unfilled orders as of November 30, 1942, totaled 1,822 locomotives, including 938 steam, 48 electrics, 827 Diesel-electrics, and nine of other types. A year earlier, on November 30, 1941, there were unfilled orders for 1,022 locomotives, including 364 steam, 51 electrics, 556 Diesel-electrics, and 51 of other types.

Data supplied by the Car Service Division, Association of American Railroads, on locomotive building in railroad shops show that five locomotives (four steam and one electric) were thus produced in November, 1942, the same as in the previous month. In November, 1941, four locomotives (all steam) were built in railroad shops. Railroad shop production for the first 11 months of last year totaled 68 locomotives, including 50 steam and 18 electrics, as compared with 18, including 16 steam and two electrics, during the first 11 months of 1941. As of December 1, 1942, railroad shops had unfilled orders for 103 locomotives, including 90 steam and 13 electrics.

Metal Grating Running Boards To Get Consideration

Acting on an application by the Erie, the Interstate Commerce Commission has given notice of its intention to investigate and issue an order without hearing, unless request to be heard is filed within 20 days from January 14, in the matter of an experimental installation on 20 switching locomotives of running boards of copper bearing steel grating. The installation, to continue until July 1, 1944, is intended to determine whether such running boards will be as safe as, or safer than, those made of wood.

Representation of Employees

The National Mediation Board has announced that, as the result of an election, the Order of Railroad Telegraphers has been designated to represent operators and ticket clerks of the Hannibal Union Depot and the Keokuk Union Depot.

The Brotherhood of Locomotive Engineers lost to the Brotherhood of Locomotive Firemen & Enginemen by a vote of 276 to 239 designation of authority to represent locomotive engineers of the Denver & Rio Grande Western, following an N. M. B. decision that the road's regularly assigned and extra engineers as of November 15, 1942, should be entitled to vote.

Idaho Intrastate Rates

The Interstate Commerce Commission in a report by Commissioner Miller has found that unjust discrimination against interstate commerce results from the refusal of the Public Utilities Commission of Idaho to permit the application of the Ex Parte 148 increases to intrastate rates on logs, poles, piling, posts, and fuel wood. At the same time it found that no discrimination results from the failure to apply the increases to sugar beets, beet-sugar molasses, lime rock, beet pulp, and hogged fuel.

Commissioner Aitchison, dissenting in part agreed with the latter; but he would rule in like fashion with respect to all of the commodities involved. He pointed out that the Idaho commission had authorized the application of the increases to intrastate rates and fares generally, adding that when a state has done that, "some latitude of discretion is properly to be left with it as to adjustment of particular rates which may

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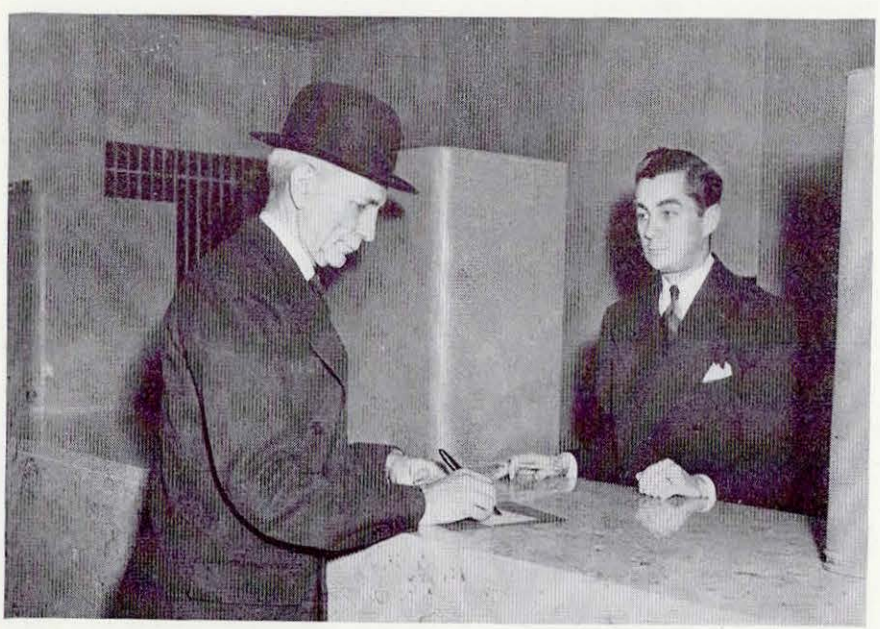

ODT's General Young Is New Statler's First Guest

Brigadier General Charles D. Young, Deputy Director of the ODT (on leave from the P. R. R.), registers as the first guest at Washington's much-needed new hotel, the Statler. The hostelry will not be ready for complete opening until the end of the month, but because of the acute housing shortage it began accepting guests on January 18.

discourage patronage." Commissioner Splawn agreed with Mr. Aitchison, while the dissent of Commissioner Johnson was noted.

The majority report stated that an order would be entered within 30 days of the date of the service of the report unless the Idaho commission meanwhile permits the increases required.

Lets Frisco Buy Truck Routes

Purchase by Frisco Transportation Company, affiliate of the St. Louis San Francisco, of common-carrier truck routes between St. Louis, Mo., and Springfield, 235 miles, between Memphis, Tenn., and Columbus, Miss., 170 miles, and between Nettleton, Miss., and Wren, 22 miles, have been approved conditionally by the Interstate Commerce Commission, Division 4. The operating rights will be purchased from William B. Mayers, doing business as the Mayers-National Truck Line.

The conditions include the usual one requiring the write-off of the increase in "Other Intangible Property" resulting from the transaction; and another stipulating that the rights acquired shall be modified to exclude the right to serve Leland, Miss., as an off-rout point.

Joint Boards Take Different Views of Motor Applications

Joint Boards Nos. 77, composed of B. L. Templeton of Texas, and No. 92, composed of W. B. Blake of Iowa, have recently submitted to the Interstate Commerce Commission proposed reports on highway applications of railroad affiliates, recommending different findings with respect to the usual contention of protestant motor carriers that the railroads should be left to effect coordinated services through arrangements with independent operators.

Joint Board No. 77 would reject the contention and grant the Missouri Pacific Freight Transport Company certificates authorizing common-carrier trucking operations over 39 Texas routes. Joint Board No. 92, on the other hand, would have the commission heed the protest and deny applications of the Rock Island Motor Transit Company, affiliate of the Chicago, Rock Island & Pacific, for certificates covering common-carrier trucking operations over four Iowa routes.

In the former proceeding—No. MC-89723 (Sub-No. 4)—the board cites *Kansas City Southern Transport Co., Inc., Com. Carrier Application, 28 M. C. C. 5,* and other cases wherein the commission decided the issue against the motor carriers. Moreover, this board would not impose upon the M. P. affiliate either the prior-or-subsequent-haul or the key-point condition. "The joint board," said the report, "is of the opinion and finds that a freezing, so to speak, of break bulk points, or the fixing of so-called key points in this case would interfere with applicant's ability to render an efficient, economical, expeditious coordinated rail-truck service."

In the Rock Island case—No. MC-29130 (Sub-No. 26)—the board noted that protestants "are willing to handle for applicant and the railway all freight destined to these points not served by applicant and are ready to enter into an arrangement with them to perform this service." Without citations, this board goes on to assert that the commission "has consistently adhered to the view that in order to establish a sound transportation system, existing motor carriers should normally be accorded the right to transport all traffic which they can handle adequately, efficiently, and economically in the territory served by them as against any person seeking to enter the field."

Freight Car Loading

Loadings of revenue freight for the week ended January 16 totaled 755,369 cars, the Association of American Railroads announced on January 21. This was an increase of 39,097 cars, or 5.5 per cent, above the preceding week, a decrease of 55,958, or 6.9 per cent, below the corresponding week last year, and an increase of 51,872, or 7.4 per cent, above the comparable 1941 week.

As reported in last week's issue, loadings of revenue freight for the week ended January 9 totaled 716,272 cars, and the summary for that week, compiled by the Car Service Division, follows:

Revenue Freight Car Loadings

For the Week Ended Saturday, January 9

District	1943	1942	1941
Eastern	138,626	154,082	158,167
Allegheny	150,803	161,968	154,334
Pocahontas	50,970	50,236	46,337
Southern	114,820	117,339	112,985
Northwestern	79,485	85,465	82,210
Central Western	113,990	115,830	104,945
Southwestern	67,578	52,052	52,657
Total Western Districts	261,053	253,347	239,812
Total All Roads	716,272	736,972	711,635
Commodities			
Grain and grain products	48,362	35,842	34,421
Live stock	15,556	15,939	13,044
Coal	156,806	166,184	152,352
Coke	15,335	14,223	13,711
Forest products	36,899	35,031	37,724
Ore	14,737	11,818	12,612
Merchandise l.c.l.	85,471	139,844	146,716
Miscellaneous	343,106	318,091	301,055
January 9	716,272	736,972	711,635
January 2	621,048	676,534	614,171
December 26	591,595	606,502	545,307
December 19	742,911	798,868	697,755
December 12	740,336	807,225	736,340
Cumulative Total, 2 weeks	1,337,320	1,413,506	1,325,806

In Canada.—Carloadings for the week ended January 9 totaled 57,732, as compared with 56,642 for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
January 9, 1943	57,732	31,715
January 2, 1943	45,767	29,625
December 26, 1942	48,578	31,745
January 10, 1942	56,642	25,728
Cumulative Totals for Canada:		
January 9, 1943	103,499	61,340
January 10, 1942	105,882	51,205
January 11, 1941	94,839	50,834

The Railroads of Oklahoma

The railroads of Oklahoma are surveyed in Bulletin No. 60 of the Railway & Locomotive Historical Society. Opening with a short history of railroads in the state, the survey continues with a table of the railroads with mileage according to 1940 records of the State Corporation Commission; a table of all companies which have operated lines of railroad in Oklahoma, inclusive of private railroads; the corporate history and construction records of railroads in the state; and an index of corporate identities that have built or operated steam or interurban lines of railroad therein. It concludes with a bibliography and a map of the state showing all lines of railroad built within it during the period 1870-1940. Of additional interest are the numerous photographs of old rolling stock and structures.

December Operating Revenues 43.9 Per Cent Above 1941

Preliminary reports from 89 Class I railroads, representing 82.7 per cent of total operating revenues, made public January 19 by the Association of American Railroads, show that those roads in December, 1942, had estimated operating revenues amounting to $570,839,881, compared with $396,815,417 in the same month of 1941, or an increase of 43.9 per cent. December freight revenues of the 89 roads amounted to $433,720,487 compared with $320,879,937 in December, 1941, or an increase of 35.2 per cent. Passenger revenues totaled $95,951,777 compared with $45,448,900 in December, 1941, or an increase of 111.1 per cent.

Charges for Protective Service

The Interstate Commerce Commission last week made public a January 11 order in the No. 20769 proceeding wherein the railroads are under orders to establish and maintain separately-published charges for refrigeration services in connection with the handling of perishable freight.

The effect of the January 11 order, issued upon consideration of petitions from Swift & Company, other packers, Anheuser-Busch, Inc., and other brewers, is to postpone "until further order of the commission" the previous orders insofar as they would require charges for supervision in connection with icing, for ice haulage, and for station auditing and accounting expense. At the same time it affirms the previous orders insofar as they require the establishment of switching charges for application in connection with each icing.

More Time for Change to New Rule on Fare Fractions

Granting a petition filed by passenger-carrying railroads, the Interstate Commerce Commission has extended from January 20 to April 20 the time within which the petitioners may, at their option, continue applying the rule for the disposition of fractions as originally prescribed in connection with the fare-increase phase of Ex Parte 148.

That rule stipulates that where total increased fares are less than $1, all fractions of less than one-half cent shall be dropped and all over one-half cent may be increased to the next whole cent; fares over $1 may be adjusted to end in 0 or 5, but no fare may be increased more than 2.5 cents for that purpose. The new rule, which the commission prescribed last July

to replace the foregoing, provides with respect to all the fares that fractions of less than one-half cent shall be dropped and fractions of more than one-half cent increased to the next cent. In addition there has been a special modification whereby New York-Washington and New York-Philadelphia fares may be kept on the ending-in-0-or-5 basis.

Senate Interstate Commerce Committee Members

Republicans now have nine of the 21 memberships on the Senate committee on interstate commerce, as compared with seven in the previous Congress. Senator Wheeler, Democrat of Montana, remains as chairman of the committee, while the other 11 Democratic members as well as seven of the Republicans are also carry-overs.

The two new Republican members are Senators Hawkes of New Jersey and Moore of Oklahoma. They replace Senator Andrews of Florida and former Senator Schwartz of Wyoming. Thus the committee now consists of: Democrats—Chairman Wheeler, Smith of South Carolina, Wagner of New York, Barkley of Kentucky, Bone of Washington, Truman of Missouri, Johnson of Colorado, Hill of Alabama, Stewart of Tennessee, Clark of Idaho, Tunnell of Delaware, McFarland of Arizona; Republicans—White of Maine, Austin of Vermont, Shipstead of Minnesota, Tobey of New Hampshire, Reed of Kansas, Gurney of South Dakota, Brooks of Illinois, Hawkes of New Jersey, Moore of Oklahoma.

P. R. R. Subsidiary Gets Motor Carrier Certificates

The Interstate Commerce Commission, Division 5, has found in No. MC-19201 that the Pennsylvania Truck Lines, subsidiary of the Pennsylvania, is entitled to certificates covering various common-carrier trucking operations, including rights under the Motor Carrier Act's "grandfather" clause on some 50 routes between points in Pennsylvania where the operations are in substitution for rail services of the P. R. R. and Monongahela. Similar rights were granted on three other routes upon a showing of public necessity.

The decision makes these substituted-service operations subject to the usual conditions designed to insure that they remain auxiliary to rail service, including a so-called key-point condition stipulating that no shipments shall be transported by motor vehicles between, through, or to or from, Pittsburgh, Pa., Lancaster, York, Harrisburg, Erie, and Warren. And the routes as proposed were modified by the commission to eliminate points which the applicant was already authorized to serve under rights acquired through its purchase of Barker Motor Freight, Inc.

Also, the commission rejected applicant's claim to "grandfather" rights to institute substituted-service operations between all Pennsylvania stations on the P. R. R. and Monongahela—a claim based on the fact that since prior to the June 1, 1935, "grandfather" date, the applicant had been under contractual obligation to extend its services as the railroads directed. Operations instituted on that theory after October 15, 1935 (the last date on which an operation could be launched without a prior showing of public convenience and necessity), were found by the commission to be "unlawful," and that phase of the application which sought authority to continue them was therefore denied.

Other phases of the application sought "grandfather" certificates for the transportation of: (1) General commodities between points in Allegheny County, Pa., over irregular routes; (2) general commodities, in minimum loads of 2,000 lb., between points in Allegheny County, on the one hand, and points in Pennsylvania within 50 miles of the City-County Building, Pittsburgh, Pa., on the other, over irregular routes; (3) commodities requiring special handling or special equipment between points in Allegheny County, on the one hand, and points in Ohio, West Virginia, and Maryland, on the other, over irregular routes. Certificates were granted covering (1) and (3), although in the latter connection authority to serve Maryland points was denied. With respect to (2), the commission found that "these operations have not occurred in sufficient volume or continuity to justify the grant of authority sought."

* * *

Women Now Employed by Railway Express Agency

More than two-score women are now handling, weighing and billing express packages at the Seattle, Wash., terminal of the Railway Express Agency.

Club Meetings

The New York division of the Railroad Enthusiasts, Inc., will meet on March 26 at 7:45 p. m. in Rm. 2728 Grand Central terminal, New York. M. H. Roberts, engineer of the Franklin Railway Supply Company, will address the meeting on the subject of "Steam Distribution Systems on Railroad Locomotives." Motion pictures depicting some phase of railroad operation will be included in the program.

The next meeting of the New England Railroad Club will be held at 6:30 p. m. on February 9 at the Hotel Touraine, Boston, Mass. F. K. Mitchell, assistant general superintendent motive power and rolling stock of the New York Central, will present a paper on "Logistics and the Railroads."

The Toronto Railway Club will hold a "Ladies Night" on February 22 at 8:30 p. m., at the Royal York Hotel, Toronto, with entertainment, dancing and refreshments.

The Railway Club of Pittsburgh will meet on January 28, at 8 o'clock, at the Fort Pitt Hotel, Pittsburgh, Pa. Brigadier-General C. D. Young, assistant director, Office of Defense Transportation, will address the meeting on the subject of the

"ODT as a Claimant Agency in the WPB's Controlled Materials Plan." A sound picture entitled "Railroads Speed the Freights" will also be shown.

The Northwest Car Men's Association will meet at 8 p. m. on February 1 at the Midway Club, St. Paul, Minn. Proposed changes in A. A. R. Rules as presented by the A. A. R. Committee will be discussed.

The Canadian Railway Club will meet at 8 p. m. on February 8 at the Windsor hotel, Montreal, Que. "Post War Reconstruction" will be the title of an address by Dr. Cyril F. James, principal and vice-chancellor of McGill university.

C. P. R. Net Earnings

In the January 2 *Railway Age*, page 57, first paragraph, the statement was made that the operating net of the Canadian National for 1942 would be about $85,000,000 and that the net operating revenue of the Canadian Pacific would be in the neighborhood of $48,000,000.

These C. N. R. and C. P. R. totals, as stated, are not fairly comparable—since the Canadian Pacific figure (which it calls "net earnings") is equivalent to the designation "net railway operating income" as used in the United States, while the Canadian National total is that which corresponds to "net operating revenue"—that is, it does not include deductions for taxes, joint facility rents and hire of equipment. The Canadian Pacific total for "net operating income"—a figure comparable to that of the C. N. R.'s $85,000,000—in 1942 was approximately $75,000,000.

Sees Air Transport Taking All First Class Mail, Much Lcl.

While some airline executives are relatively modest in their estimates of the amount of freight traffic they expect to divert from the railroads—one air transport magnate is inclined to a somewhat more confident view. He is Croil Hunter, president and general manager of Northwest Airlines, Inc. A recent speech of his has been given distribution in the Congressional Record—thanks to the generosity of Congressman W. G. Magnuson of Washington, who exercised his "leave to print" in Mr. Hunter's behalf.

"It is certainly conceivable," said Mr. Hunter, "that present [air] passenger fares will be reduced from the current rate of around 5 cents per mile to 3 cents per mile or even less, and that air cargo rates may be reduced . . . to 15 cents or even 10 cents a ton-mile.

"When we consider that present rail express rates average from 11 cents to 18 cents per ton-mile, first class l. c. l. freight shipments from 7 cents to 8 cents per ton-mile, and motor truck rates 3 cents to 4 cents per ton-mile, it is certainly clear that air cargo rates will be competitive and that a substantial tonnage now moved by rail express and l. c. l. freight will be diverted to air, as well as some which is now carried by motor truck.

"A diversion of even half such high-grade cargo, now carried by surface transportation, will require a fleet of some 25 to 30 thousand airplanes, as compared to a maximum of 350 planes used in commercial service before about half were requisitioned by the government. This does not include the additional number that will be required for carrying all first-class mail and for carrying Pullman and other first-class railroad passengers by air."

Mr. Hunter also spoke eloquently in behalf of "freedom of the air"—by which he meant that duly licensed planes should be permitted to cross foreign countries and land in foreign airports, without the foreign country being allowed to deny them this privilege. In his concept of "freedom of the air," he did not indicate that he included freedom for any responsible party so inclined to embark in air transport.

The outlook from all this prospective expansion in aviation, Mr. Hunter explained, is that this industry will henceforth "provide a powerful bulwark for our national defense by constantly maintaining a reservoir of aircraft and trained personnel for any future emergency." What the country will do for l. c. l., mail and passenger transportation when the "powerful bulwark" goes off to war again and throws back on the railroads all the traffic it now proposes to take away from them—railroads which then, presumably, will have scrapped their facilities for handling such business, Mr. Hunter did not say. He did, however, in rather general terms opine that the diversion by the air lines of cargo from other forms of transport "should not be a matter of great concern to surface carriers, as it will be a gradual process."

Meantime, New York's Congressman Hamilton Fish has introduced a resolution calling on the House to create an aviation committee of 21 members—the purpose of which would be promotional. "There is no reason why thousands of planes and pilots could not be used, if plans were made in advance, to carry first-class mail in the United States and abroad," said the Dutchess county lawgiver. "An aviation committee in Congress, composed of experts," he said, "could help save our aviation industry and make it, as Eddie Rickenbacker says, the kingpin in American economy."

Roads May Use Empty "Reefers" For Westbound Freight

The Interstate Commerce Commission's Service Order No. 104, effective January 25, authorizes railroads, at their option, to furnish and transport not more than three refrigerator cars of Pacific Fruit Express or Santa Fe Refrigerator Despatch ownership instead of each box car ordered for carload shipments westbound to points in California, Arizona, Utah, Nevada and Idaho, subject to the carload minimum weight which would have applied if the shipment had been loaded in a box car, except where the carload minimum varies with the size of the car.

Stating that this action is taken to prevent shortage of equipment, empty car mileage, and traffic congestion, the commission provides that its Service Order No. 68 and other commission orders are suspended in so far as they conflict with the requirements of this order. Conflicting tariff provisions also are suspended.

Equipment and Supplies

Budd Delivered 44 Cars to Railroads in 1942

Information just received which should have been included in the article, "Few Passenger Car Improvements Were Made in 1942", published in the *Railway Age* issue of January 2, 1943, gives a detailed list of the stainless-steel passenger cars built by the Edward G. Budd Manufacturing Company, Philadelphia, Pa., and delivered to the railroads in 1942. Forty-four cars, in all, were involved, including 9 diners and 21 mail cars for the Atchison, Topeka & Santa Fe; 3 dining cars for the Chicago, Rock Island & Pacific, and 12 cars for the Missouri Pacific as follows: 2 baggage-express, 2 baggage-mail, 2 chair, 2 chair-grill-dormitory, 2 diner-lounges and 2 mail-storage cars.

LOCOMOTIVES

Locomotive Building Program Limited by Lack of Orders?

It is reliably reported that the program planned by the War Production Board to assure the construction and delivery of all the steam locomotives authorized for the railroads during 1943, is being jeopardized by the railroads' failure, up to the present, to conclude contracts with builders for more locomotives than have been scheduled through August. As a result of this situation, it is said that the WPB, with the knowledge and acquiescence of the Office of Defense Transportation, is considering, or may have already arranged, to release pressure on builders to adhere to present schedules of production.

LEHIGH VALLEY.—The War Production Board has authorized the American Locomotive Company to build ten steam freight locomotives of 4-8-4 wheel arrangement for the Lehigh Valley. The order for these locomotives was listed in the Annual Statistical and Outlook Number of the *Railway Age* as having been placed in November, 1942, with the builder to be determined.

CENTRAL OF GEORGIA.—The War Production Board has authorized the Lima Locomotive Works to build eight steam passenger-and-freight locomotives of 4-8-4 wheel arrangement for the Central of Georgia. Deliveries are expected to begin in June. The order for these locomotives was originally placed in November, 1942, with the Baldwin Locomotive Works.

NEW SUEZ RAILWAY BRIDGE.—Trains now run across the Suez Canal from Egypt into Palestine by means of a new swing bridge which makes possible a direct run from Cairo to Beirut, according to the South African Railways & Harbors magazine. During the first World War a makeshift floating bridge was used when the Palestine railway was originally built. This was done away with after that war and since that time the only link between the Egyptian and Palestine railways has been a small, cumbersome train ferry.

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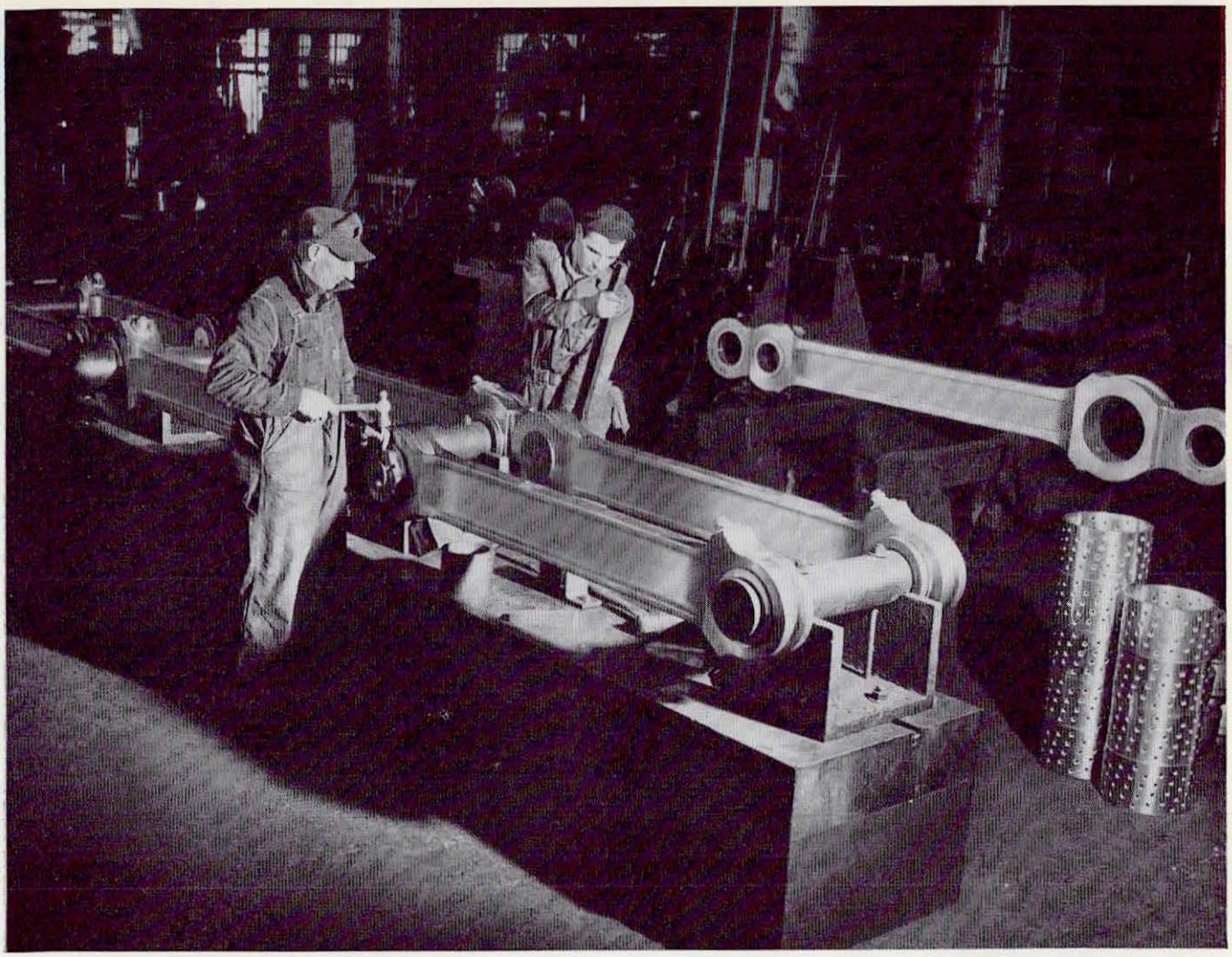


Typical of the care and accuracy with which Lima power is constructed, is the rod assembly jig illustrated above. The machined rods must fit on these jigs thus insuring interchangeability and avoiding the necessity of adjustment when the rods are applied to locomotives. This care in rod manufacture is one of the reasons why Lima built locomotives "break-in" easily.

LIMA-BUILT *is Well Built*

To meet war-time traffic demands locomotives are being pushed harder than ever before. In today's emergency Lima-built power is proving its ability to take the increasing burden placed upon it.

The old railroaders at Lima know the service expected of their product and they go to unusual lengths in their manufacturing processes to build the longest possible life into each locomotive part.

This policy is paying dividends for the railroads in the present emergency.

LIMA LOCOMOTIVE WORKS LIMA LOCOMOTIVE WORKS INCORPORATED **INCORPORATED, LIMA, OHIO**

Supply Trade

The Army-Navy "E" award was presented to the Erie, Pa., works of the **Bucyrus-Erie Company** on January 16.

The Augusta, Ga., works of the **Babcock & Wilcox Co.** was presented the Army-Navy "E" pennant for outstanding production of refractories on January 22.

Arnold W. Nelson has been appointed district representative in the Minneapolis, Minn., territory for the **Allegheny Ludlum Steel Corporation,** to succeed the E. L. Sandberg Company.

The Charles F. Elmes Engineering Works became a part of **American Steel Foundries** on December 31, 1942. Charles F. Elmes has remained as general manager and the present Elmes organization will continue intact and operate as a separate unit.

Ronald R. Monroe, vice-president of the **J. G. Brill Company,** has been elected president, to succeed **Leslie E. Hess,** who becomes chairman of the board. Charles J. Hardy, former chairman, will continue as chairman of the Executive committee.

Ronald R. Monroe

Mr. Monroe was elected vice-president of the Brill company when he joined that organization in February, 1942. He was graduated from the University of Michigan in 1915 and gained his early business experience in the middle west, where he was president of the Des Moines (Iowa) Foundry & Machine Co. for several years and director of two other manufacturing companies. He became director and executive vice-president of the Utilities Power & Light Corporation in 1935, and during the reorganization of that company served as executive assistant to the trustee. For the past several years Mr. Monroe has served on the industrial advisory committee of the Federal Reserve Bank of Chicago. He holds directorships in the Missouri Utilities Company and the Black Hills Power & Light Co.

The Joshua Hendy Iron Works of Sunnyvale, Calif., has acquired the **Crocker-Wheeler Electric Manufacturing Company** of Ampere, N. J., and the **Pomona Pump Company** and its subsidiary, the **Westco Pump** division, of Pomona, Cal., and St. Louis, Mo.

W. G. Paton, assistant to the general manager, and **W. R. Engstrom,** district manager at Seattle, Wash., have been elected vice-presidents of the **Austin Company.** Mr. Paton will also assume the posts of assistant secretary and assistant treasurer of the company.

Nearly 15,000 more Chicagoans will soon become wearers of the Army-Navy "E" by the award of that honor to the **Crane Company,** which is cited for high achievements in meeting vast wartime demands for its regular products of valves, fittings, and piping accessories. Presentation ceremonies are scheduled for late January.

The American Optical Company, Southbridge, Mass., celebrated its 110th anniversary on January 18 by reporting the greatest lens production of its history during 1942. Established in 1833 as a one-man concern, the company now employs more than 12,000 men and women, and possesses three additional factories in the United States, two in Canada and one in England. More than 70 per cent of its production is going directly and indirectly into the war effort. The company also announced the completion of a large lens-grinding plant at Brattleboro, Vt.

Construction

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—This road proposes to relocate its eastbound main track between Blackbird Junction, Minn., and Island Siding, so that it will be adjacent to the westbound track between those points instead of following the opposite side of the Vermilion River. The project will result in 9.02 miles of double track and 3.51 miles of single track, the latter signaled for movement in either direction by centralized remote control.

MISSOURI PACIFIC.—Grading has been started on 5,573-ft. line change at Otterville, Mo., which will reduce the curvature from 3 deg. 59 min. to 2 deg., reduce distance 352 ft. and permit a speed restriction to be raised at this point. The work will require approximately 58,000 cu. yd. of earth excavation, 20,000 cu. yd. of rock excavation and the construction of three small culverts.

MISSOURI PACIFIC.—Because of war traffic, this road plans to strengthen its bridge No. 2 across the Arkansas river at Ft. Smith, Ark., early in 1943 so that heavier power may use the bridge. The bridge consists of 10 through pin-connected truss spans each 197 ft. long and one through pin-connected truss draw span 366 ft. long. The bridge will be reinforced with 250 tons of structural steel. Several trestles on the line between Ft. Smith and Paris, Ark., have already been strengthened.

Abandonments

BOSTON & MAINE-SUNCOOK VALLEY.—Division 4 of the Interstate Commerce Commission has authorized the Boston & Maine to abandon, and the Suncook Valley to abandon operation of, a 1.3-mile line within the town of Hooksett, N. H.

CHESAPEAKE & OHIO.—Authority has been granted this company by Division 4 of the Interstate Commerce Commission to abandon its line from a point near Barrett, W. Va., to Kent, 4.1 miles.

CHICAGO, BURLINGTON & QUINCY.—Division 4 of the Interstate Commerce Commission has authorized this road to abandon its branch from Sedan, Iowa, to Moulton, 4.83 miles, and to abandon operation under trackage rights over a line of the Wabash from Moulton to Bloomfield, 14.14 miles. In a dissenting opinion Commissioner Porter terms the abandonment "an incipient threat to adequate transportation that is unwise and unwarranted at this time." It will, he says, result in severance of a bridge line 196 miles long which has been in existence 70 years, with the result that 12,600 or more additional car miles must be performed annually to handle diverted traffic.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—This road has applied to the Interstate Commerce Commission for authority to abandon a 14.9-mile line between Merrill, Wis., and New Wood.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—Division 4 of the Interstate Commerce Commission for authority to abandon a branch line extending from a point near track from Blackbird Junction, Minn., to Island Siding, 13.19 miles, to permit construction of a substitute line on a new location.

CHICAGO & NORTH WESTERN.—In a proposed report in Finance Docket 13907 Examiner A. G. Nye has recommended that the Interstate Commerce Commission deny this road's application for authority to abandon a branch from Belle Plaine, Iowa, to What Cheer, 37.69 miles, without prejudice to its right to renew the application if at the end of another year it can be shown that operation can be conducted only at a loss. The examiner suggests that the patrons who protested the abandonment should be given an opportunity to provide sufficient traffic to warrant operation of the line. He adds that they "might well take notice that their failure to patronize it in the future will eventually lead to abandonment."

DULUTH, MISSABE & IRON RANGE.—This road has applied to the Interstate Commerce Commission for authority to abandon a branch line extending from a point near Culver, Minn., along the Artichoke river to the north bank of the St. Louis river, 5.04 miles.

INTERNATIONAL-GREAT NORTHERN.—This road has applied to the Interstate Commerce Commission for authority to aban-

don its 44.7-mi. line between Navasota, Tex., and Madisonville.

NEWAUKUM VALLEY.—This road has applied to the Interstate Commerce Commission for authority to abandon its entire line extending from Napavine, Wash., to Onalaska, 10.6 miles.

NEW YORK CENTRAL.—In a proposed report in Finance Docket 13914 Examiner Lucian Jordan has recommended that the Interstate Commerce Commission authorize this company to abandon its electrified Yonkers branch, extending from Van Cortlandt Park Junction, N. Y., to Getty Square, 3.1 miles.

PERE MARQUETTE.—In a proposed report in Finance Docket 13937 Examiner Paul C. Albus has recommended that the Interstate Commerce Commission authorize this road to abandon its branch from a point near Mecosta, Mich., to Barryton, 11.23 miles.

SACRAMENTO NORTHERN.—This road has applied to the Interstate Commerce Commission for authority to abandon 0.59 mi. of track in Marysville, Calif.

SANTA FE NORTHWESTERN.—This road has applied to the Interstate Commerce Commission for authority to abandon its entire line, which extends from West Bernalillo, N. M., to Bernalillo, 1.2 miles.

SOUTHERN PACIFIC.—This company and the Central Pacific have been authorized by Division 4 of the Interstate Commerce Commission to abandon operation of and to abandon, respectively, a branch from a point near Laws, Calif., to Benton, 30.648 miles.

UNION PACIFIC.—This road and the Oregon Short Line, lessor, have been authorized by the Interstate Commerce Commission, Division 4, to abandon operation of and to abandon, respectively, a branch from Montpelier, Ida., to Paris, 9.495 miles. Jurisdiction was questioned by the Idaho Attorney General, but the commission found that its powers in the case are clearly defined in section 1(18) of the Interstate Commerce Act.

WESTERN MARYLAND.—Authority has been granted this company by Division 4 of the Interstate Commerce Commission to abandon its line from a point near Dailey, W. Va., to Huttonsville, 7.58 miles.

DOGS DO SLEUTHING FOR A. C. F.—Dogs especially trained by the United States Army to search out saboteurs make the rounds nightly with guards at the American Car & Foundry Co. tank plant in Pennsylvania. The dogs are especially adept in searching dark corners and areas where piles of material afford lurking places for trespassers. Kennels are maintained at the plant and the dogs sleep and rest during the daytime. The dogs were given to the Army by patriotic citizens who answered the call for dogs that could be trained for sentry duty, messenger service, and other duties. Additional dogs will be added as they are trained.

Financial

ATCHISON, TOPEKA & SANTA FE.—*Leases of Subsidiaries.*—Division 4 of the Interstate Commerce Commission has authorized this company to lease the property of certain subsidiary companies controlled by ownership of substantially all of their capital stock and indebtedness; namely the California, Arizona & Santa Fe; Dodge City & Cimarron Valley; Fresno Interurban; Garden City, Gulf & Northern; Kansas Southwestern; and New Mexico Central. These leases are in substitution for existing leases on substantially the same terms, except that provision is made for depreciation accounting for fixed property under the terms of the commission's mandatory orders effective January 1, 1943.

BANGOR & AROOSTOOK.—*Complete Refunding.*—The Bangor & Aroostook is reported to have completed the refunding of its 5 per cent mortgage bonds outstanding in the amount of $4,000,000, which matured January 1, by the sale at par of a similar amount of collateral trust 4 per cent bonds due in 1951 to the Reconstruction Finance Corporation. The new issue is secured by $8,000,000 of the railroad's consolidated refunding mortgage 4 per cent bonds, due in 1951.

BOSTON TERMINAL.—*Reorganization Plan Withdrawn.*—At the request of the trustees of the Old Colony, Division 4 of the Interstate Commerce Commission has authorized withdrawal of the plan of reorganization for this company filed by them on May 3, 1940. At the same time the hearing scheduled for January 15 was canceled.

CANADIAN NATIONAL.—*Purchase of Atlantic & St. Lawrence.*—Division 4 of the Interstate Commerce Commission has authorized this company to acquire control, by purchase of capital stock, of the Atlantic & St. Lawrence, which it has operated under lease. Most of the stock to be purchased is now in the hands of the Canadian government as the result of a program for repatriating securities held by British subjects.

CENTRAL OF NEW JERSEY.—*Trackage Rights.*—This road has applied to the Interstate Commerce Commission for authority to enter trackage-rights arrangements to effect direct interchange between it and the Ironton at Catasauqua, Pa., by use of a Lehigh & New England bridge at that point.

DELAWARE & HUDSON.—*Debt Adjustment Plan.*—The Delaware & Hudson Company and the Delaware & Hudson Railroad Corporation have filed with the Interstate Commerce Commission a joint application for an order authorizing the modification of securities as proposed in the applicants' plan of debt adjustment under the McLaughlin Act (i. e., the revived "Chandler Act"). As noted in the *Railway Age* of December 26, page 1044, the plan would meet the May 1 maturity of $47,769,000 of first and refunding mortgage 4 per cent bonds by paying 10 per cent of the principal in cash and extending the maturity date of the remainder until May 1, 1963, at the same rate. The application asserts that the applicants' financial problem arises "solely from the bond maturity on May 1, 1943," and is thus "of a temporary nature and will be eliminated by the postponement of the maturity date." It is also asserted that the applicants "are not in need of financial reorganization of the character provided under section 77 of the Bankruptcy Act," for the reason, among others, that their earnings "are reasonably expected to continue to provide ample coverage of all fixed charges," including interest on the bonds to be extended. The immediate effect, it is pointed out, will be a reduction of $4,776,900 in debt brought about by the 10 per cent cash payments, and a resultant saving of $191,076 in annual fixed charges. Finally, the applicants express their belief that they will be able to pay, refund, or otherwise provide for the bonds which remain outstanding on the maturity date, as extended to 1963.

FONDA, JOHNSTOWN & GLOVERSVILLE.—*Creditors to Vote on Reorganization Plan.*—The Interstate Commerce Commission on January 18 announced that on or about January 27 the plan for the reorganization of this company approved by the commission would be submitted to creditors for their acceptance or rejection by vote.

MISSOURI PACIFIC.—*Reorganization Plan Attacked in Circuit Court.*—The Missouri Pacific and holders of its securities on January 13 asked the United States Circuit Court of Appeals at Kansas City, Mo., to reverse and remand to the Interstate Commerce Commission for further study the commission's reorganization plan of this railroad, which was approved by the United States district court at St. Louis, Mo., in 1940. The security holders claimed they were treated unfairly under terms of the plan now in force.

NEW YORK, CHICAGO & ST. LOUIS.—*Dividend Statement by John W. Davin.*—Preferred and common stockholders may expect no dividends for another five years, according to a statement by John W. Davin, president, to newspaper reporters on January 19. Mr. Davin indicated it was the policy of the present management to first straighten out the railroad's financial structure. He said that although the $88,742,000 gross revenues in 1942 were the largest ever received, taxes also increased so that 1942 net income amounted to only about $8,690,000, as compared with $12,687,000 in the preceding year. Cash and securities on hand exceeded $20,000,000 but a federal tax liability against the road amounted to $19,000,000. The railroad also has $21,000,000 of bonds maturing around October 1, 1947.

PENNSYLVANIA.—*Pennroad Corporation Liability.*—The United States district court at Philadelphia, Pa., on January 19 held the Pennsylvania liable to the Pennroad Corporation for $22,104,515 as a result of losses in four transactions in 1930 and 1931 involving National Freight Forwarding Company operations, and purchases of

News Department continued on second left-hand page

Security Circulators

Interior view of firebox of the Union Pacific 4-6-6-4 showing positioning of 5 Security Circulators.

AMERICAN ARCH

Security Circulator Division

KEEP 'EM STEAMING!

One of 20 new 4-6-6-4 type articulated steam locomotives delivered to the Union Pacific R. R. by American Locomotive Company.

20 of these powerful 4-6-6-4 type, articulated steam locomotives were recently delivered to the Union Pacific R. R. by American Locomotive Company. For use in high-speed freight service in mountain territory, these locomotives are capable of operating continuously under maximum horsepower output up to 70 mph.

To help maintain these standards of operation, the firebox of each of these 20 locomotives is equipped with 5 Security Circulators.

Security Circulators increase locomotive availability, assuring more ton-miles per day per locomotive.

★

Improved arch brick support for locomotive fireboxes

★

Improved circulation in side water legs

★

Reduced flue cleaning and honeycombing

★

Lower cost of boiler maintenance

★

Increased locomotive availability

COMPANY, INC.

NEW YORK • CHICAGO

stocks of the Pittsburgh & West Virginia, the Seaboard Air Line and the Boston & Maine. The court held that the award, which may be appealed by the Pennsylvania, should be distributed among the present stockholders of the Penroad Corporation.

ST. LOUIS SOUTHWESTERN.—*Reorganization Expenses.*—Division 4 of the Interstate Commerce Commission has determined the amounts of claims for allowances of compensation for services rendered and expenses incurred in this company's reorganization proceedings. Of the total amount claimed, $927,272, the total allowed to June 15, 1942, is $482,448. Certain relatively small claims were allowed in full, or substantially so, but many for larger amounts were reduced materially, and one of $84,260, that of the Dembitzer committee for foreign bondholders, was disallowed entirely, but without prejudice to further consideration upon presentation of supporting proofs.

The largest single claim was that of Walter E. Meyer, a former director and stockholder active in his own interest and that of others in the proceedings before the courts and the commission. The trustee advised that these activities were "not of benefit to the estate as a whole," and recommended that the claim be denied by the court. The commission's report, while finding that the petitioner's "expenditure of time has not been justified by the results accomplished," has approved to the extent of $35,000 his application for $183,111.

Among claims allowed in part the Southern Pacific was allowed $7,960 on a request for $9,237 for expenses incurred as a secured creditor and majority stockholder. The debtor company was allowed $28,176 on its request for $28,339 for expenses, most of which had previously been approved. John R. Turney, counsel for the debtor, was allowed $40,000 on his claim for $50,000, including allowances already approved. Alexander & Green, counsel for the Bankers Trust Company of New York, second mortgage trustee, sought $35,000 and was allowed $20,000. The Guaranty Trust Company of New York, trustee under the first-terminal and unifying mortgage, asked $32,638 and was allowed $30,138, while its counsel, Davis, Polk, Wardwell, Gardiner & Reed, requested $92,459 and received $57,459.

Other legal firms allowed large amounts included Chadbourne, Hunt, Jaeckel & Brown, counsel for the Chemical Bank & Trust Company, trustee under the general and refunding mortgage, who received $22,743 on a claim of $28,752; Mudge, Stern, Williams & Tucker and associated counsel for the Chase National Bank of New York, a secured creditor, who received $30,000 on a request for $62,500; and James Piper and his firm, counsel for the so-called Glines protective committee, who received $23,807 on a request for approval of $43,307.

WABASH.—*Reorganization Expenses.*—Division 4 of the Interstate Commerce Commission has approved maximum limits of final allowances of compensation and expenses of counsel for the managers of this company's reorganization. Fees of $177,000 and expenses of $2,573 were requested by the three firms involved. The claims for expenses were allowed in full, but compensation allowed was substantially less than that requested. Winthrop, Stimson, Putnam & Roberts requested $50,000 and were allowed $26,000; Root, Clark, Buckner & Ballantine asked $27,000 and received $16,000; and Simpson, Thatcher & Bartlett asked $100,000 and were allowed $28,000.

Average Price of Stocks and Bonds

	Jan. 19	Last week	Last year
Average price of 20 representative railway stocks..	29.99	29.40	29.53
Average price of 20 representative railway bonds..	70.02	70.08	66.08

Dividends Declared

Augusta & Savannah.—$2.50, payable December 29 to holders of record December 23.

Cleveland, Cincinnati, Chicago & St. Louis.—$5.00, semi-annually; Preferred, $1.25, quarterly, both payable January 30 to holders of record January 21.

Dover & Rockaway.—$3.00, semi-annually, payable April 1 to holders of record March 31.

East Pennsylvania.—$1.50, semi-annually, payable January 19 to holders of record December 31.

Northern of New Hampshire.—$1.50, quarterly, payable January 30 to holders of record January 14.

Rutland & Whitehall.—$1.05, payable February 15 to holders of record February 1.

Saratoga & Schenectady.—$2.00, semi-annually, payable January 15 to holders of record December 31.

Stoney Brook.—(Reduced) $2.50, semi-annually, payable January 5 to holders of record December 31.

Ware River.—$3.50, semi-annually, payable January 6 to holders of record December 31.

Wheeling & Lake Erie.—Pr. Ln., $1.00, quarterly; Cv. Preferred, $1.38, quarterly, both payable February 1 to holders of record January 26.

Railway Officers

EXECUTIVE

R. J. McMullen, superintendent and traffic manager of the Detroit & Mackinac, has been promoted to first vice-president and assistant general manager, with headquarters as before at Alpena, Mich.

H. G. Gordon has been appointed assistant to vice-president and general manager of the Central Region of the Canadian National, with headquarters at Toronto, Ont., succeeding **C. F. Needham,** who has retired.

Walter J. Tuohy, president of the Globe Coal Co., Chicago, has been elected vice-president of the Chesapeake & Ohio, with headquarters at Cleveland, Ohio, succeeding **John W. Davin,** whose election as president of the New York, Chicago & St. Louis (Nickel Plate) was reported in the *Railway Age* of December 19.

George D. Brooke has been elected chairman of the board of the Virginian, succeeding **William Robertson Coe,** who has retired from that position, but who will retain the chairmanship of the executive committee. **C. W. Brown, Jr.,** has resigned as a director, but will continue as secretary and assistant treasurer of the company. The above appointments are effective February 1. Mr. Brooke retired as president of the Chesapeake & Ohio, Nickel

* * *

C. N. R. Photo

High School Boys Come to the Rescue of Holiday Express Shipments of the C. N. R.

News Department continued on next left-hand page

how to help us serve the RAILROADS better

Franklin Railway Supply Company is 100% in war production. Part of this consists of supplying the railroads' needs and the remainder is on direct war contracts.

To insure prompt delivery of repair parts Franklin needs the railroads' help.

here's how

1. Make application for the highest priority to which you are entitled. If this is not received with your order we must ask for an amendment. This means delay in shipping the needed parts.

2. The ordering of small numbers of frequently used repair parts wastes man-power and machine time. Order parts in reasonable quantities. Not more than you require for a normal inventory but not by twos and threes.

Large numbers of small individual orders slow up the supply of everyone's needs. Alterations must be made in machine settings, dies must be changed, thereby slowing down the whole production operation. Purchasing of fabricating materials in small quantities further complicates and delays deliveries.

3. Another procedure that delays deliveries is the ordering of parts that are not within the range of the standard dimensions. A sufficient range of sizes is provided for every repair part to cover 95% of the railroads' requirements. Ordering parts with dimensions outside these standards not only slows production of other repair parts but results in delay in obtaining the special part.

By cooperating in these three requests the railroads are enabling Franklin not only to supply them with parts more promptly but to step up the tempo of Franklin's contribution to the war effort.

FRANKLIN RAILWAY SUPPLY COMPANY, INC. NEW YORK CHICAGO

In Canada: **FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL**

Plate and Pere Marquette on December 15, and has since been serving those roads in a consulting capacity, from which relationship he contemplates resigning on January 31. A photograph of Mr. Brooke and a biographical sketch of his railway career appeared in the *Railway Age* of December 19, page 1001.

Holly Stover, whose appointment to federal manager of the Toledo, Peoria & Western was reported in the *Railway Age* of January 9, was born on March 12, 1883, at Beckley, W. Va. He entered railroad service as a telegrapher of the Chesapeake & Ohio in 1897, later serving in yard service and branch line operations in the coal territory. Mr. Stover then left railway service to enter the coal industry. He is now president of the Stover Smokeless Coal Company, and of Holly Stover, Inc., and a director of the Gulf Mining Company, and the Sterling Smokeless Coal Company. Mr. Stover is also a director of the Gulf, Mobile & Ohio, and was executive representative of that road at Washington, D. C., until December 10, 1942, when he was elected vice-president with

Holly Stover

the same headquarters. Mr. Stover has also been associated with the Office of Defense Transportation since May, 1942, serving as special assistant to the director, Division of Railway Transport.

Norman B. Walton, vice-president of operation, maintenance and construction of the Canadian National, has been promoted to executive vice-president, with continued jurisdiction over his former department. Mr. Walton was born on July 27, 1884, at Palmerston, Ont., and entered railroad service in 1900 as a clerk and stenographer of the Grand Trunk at Toronto, Ont. From that year until 1907 he served with the Grand Trunk as clerk and stenographer, secretary to superintendent, telegraph operator and secretary to vice-president and assistant trainmaster. In 1907 Mr. Walton was appointed secretary to the vice-president and later inspector of transportation of the Great Northern at St. Paul, Minn., returning to the Grand Trunk at Toronto in April, 1908, in the office of the claims agent. In October of that year Mr. Walton became secretary to the general superintendent of the Grand Trunk Pacific at Winnipeg, Man., and served subsequently as trainmaster at Wainwright, Alta., assistant to general superintendent at Winnipeg, and superintendent at Edmonton, Alta. In September, 1920, Mr. Walton became assistant general superintendent of the Canadian National at Prince Rupert, B. C.,

Norman B. Walton

and in 1924 he was sent to Winnipeg as general superintendent. He was appointed general superintendent of transportation of the Western region in March, 1930, with headquarters at Winnipeg. In November, 1936, he was appointed chief of transportation for the entire system, with headquarters at Montreal, and in 1938 became vice-president in charge of operation maintenance and construction at Montreal, which position he was holding at the time of his recent appointment.

Increase of traffic in the Maritime provinces of Canada served by the Canadian National has made it necessary to enlarge the supervisory administration for the Atlantic region, and **Walter U. Appleton,** vice-president and general manager of the Atlantic region, has been appointed vice-president, with headquarters as before at Moncton, N. B., while **J. F. Pringle,** chief of transportation for the Canadian National System at Montreal, Que., has been appointed general manager of the Atlantic region at Moncton.

Mr. Appleton was born on January 29, 1878, at Moncton and entered the service of the Intercolonial (now Canadian National) as a junior clerk in October, 1890. He served successively until October, 1913, as machinist apprentice, machinist, chief clerk, assistant to superintendent of motive power and as general master mechanic for the Intercolonial. When the Intercolonial became part of the Canadian Government Railways, Mr. Appleton, in February, 1918, was appointed superintendent of motive power, and in December of the same year was made mechanical superintendent. With the amalgamation of the Canadian Government Railways and the Canadian National System, Mr. Appleton, in September, 1920, was appointed general superintendent of rolling stock, and on March 1, 1923, he became general superintendent of the Atlantic region. Mr. Appleton was appointed general manager of the Atlantic region on April 15, 1924, and in 1935 also became vice-president of that region, with headquarters at Moncton.

FINANCIAL, LEGAL AND ACCOUNTING

Donald D. Dart has been appointed assistant to general counsel of the Delaware & Hudson, with headquarters at New York.

A. P. Warren, claims agent of the Central Vermont, has been appointed acting auditor at St. Albans, Vt., succeeding **A. B. Hopper,** who has gone to Ottawa, Ont., for service with the Canadian government in its war effort.

L. A. Brewer, district claim agent of the Wabash at St. Louis, Mo., has been promoted to general claim agent of the Wabash and the Ann Arbor, with the same headquarters. He replaces **Fred D. Fauser,** whose death on January 6 was reported in the *Railway Age* of January 16.

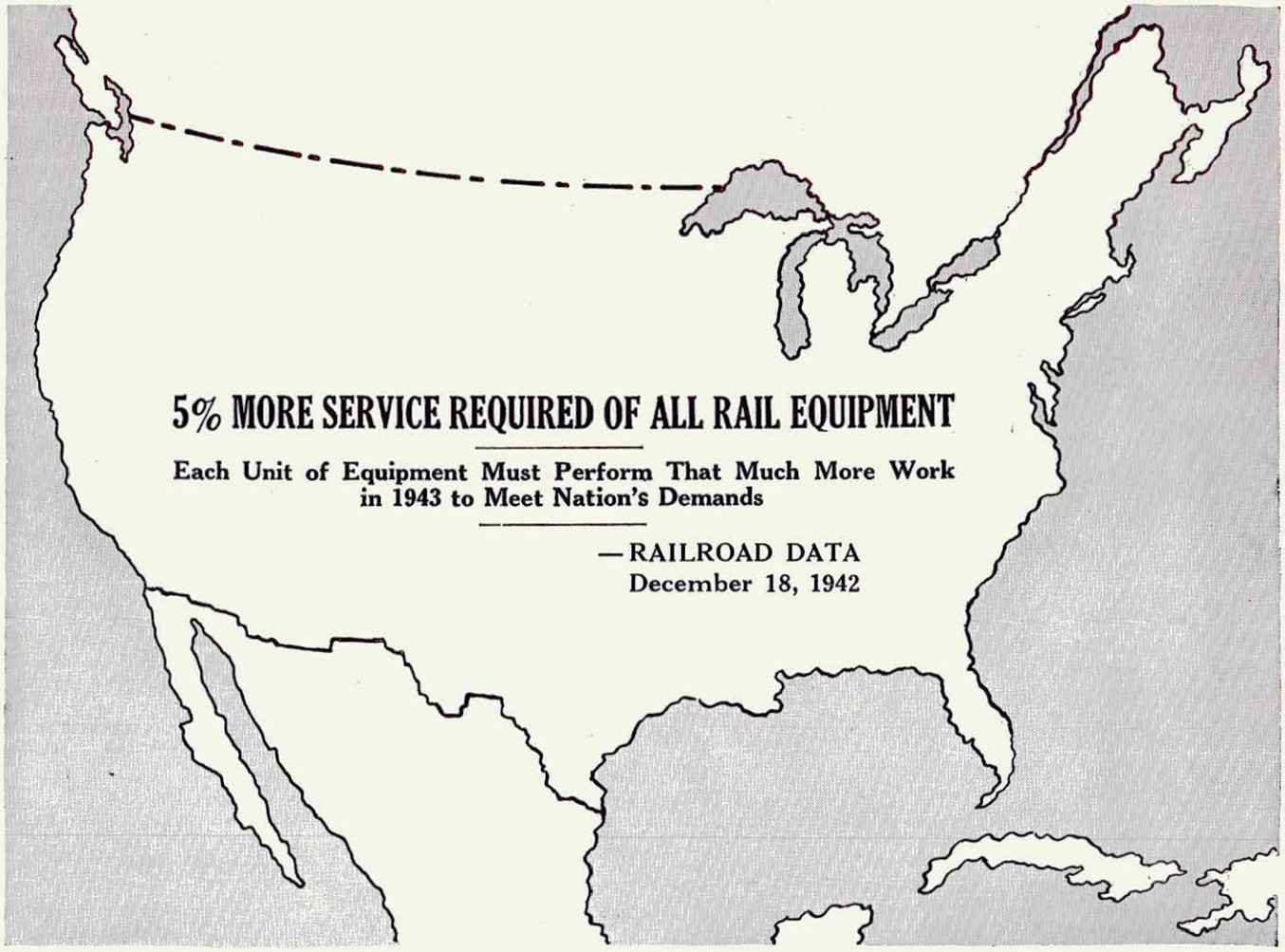
Oscar D. Weaver, whose promotion to treasurer of the Fort Worth & Denver City, and the Wichita Valley, was reported

Oscar D. Weaver

in the *Railway Age* of January 9, was born on January 12, 1881, at Ames, Tex. He graduated from Polytechnic college (now Texas Wesleyan), Fort Worth, Tex., in 1902, entering railroad service with the Fort Worth & Denver City and the Wichita Valley on May 1, 1903, as a clerk in the accounting department at Fort Worth. In 1907 he was promoted to traveling auditor and one year later became head clerk of the agents bureau. In 1912 Mr. Weaver was advanced to chief clerk of the freight accounting department, and, in 1918, to chief clerk to the auditor of revenues, becoming auditor of revenues in 1923, and holding that position until appointed treasurer.

Kenneth C. Sawin, whose promotion to general claim agent of the Illinois Central, with headquarters at Jackson, Miss., was reported in the *Railway Age* of January 9, was born on January 12, 1885, at Chicago, and entered railroad service on May 1, 1901, as an office boy for the legal department of the Illinois Central in that city. On May 1, 1909, he was advanced to secretary to the general attorney, and then be-

News Department continued on next left-hand page


5% MORE SERVICE REQUIRED OF ALL RAIL EQUIPMENT
Each Unit of Equipment Must Perform That Much More Work in 1943 to Meet Nation's Demands
—RAILROAD DATA
December 18, 1942

There is no better way to insure dependable and efficient service from your superheaters than to have them maintained to standard . . . by the Elesco Remanufacturing Service. Superheater units are rehabilitated—and vital material is conserved.

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"Position is a permanent one with headquarters in Chicago, and to receive consideration applicant should write fully, giving complete facts of age, education, experience, salary required and draft status." Address Box #598, RAILWAY AGE, 30 Church Street, New York, N. Y.

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Bettendorf Company's final inventory of New Truck Frames—Bolsters—Center Sill Ends—Fillers—Plate Supports—Draft Lugs—Box Lids—Spring Planks, both formed and not formed—also their Spring Plank Dies.

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PORT 139 1—USED BALDWIN LOCOMOTIVE—84 Ton Class 12-30-1/4-E-114, Construction No. 61159, Oil Burning, Tractive Power: 29,100#, Superheated, Wheel arrangement: 2-8-2

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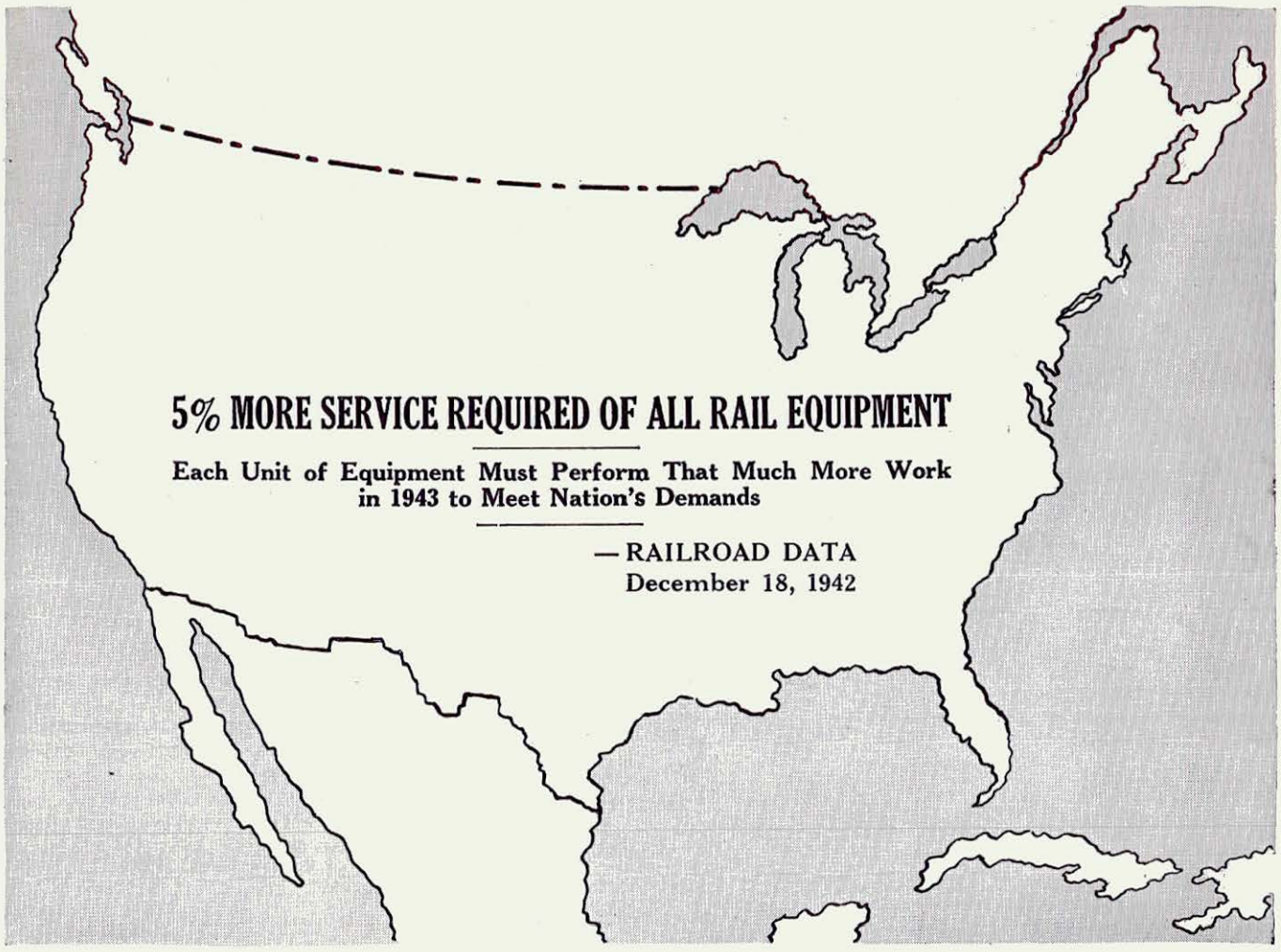
5% MORE SERVICE REQUIRED OF ALL RAIL EQUIPMENT
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came an investigator for the local attorney for the Chicago terminal. In December, 1911, Mr. Sawin was promoted to claim agent and on January 1, 1918, was also appointed chief clerk of the claim department, becoming district claim agent on July 15,

Kenneth C. Sawin

1926. On December 1, 1936, he was advanced to assistant general claim agent, with headquarters at Jackson, holding that position until his recent promotion, which became effective January 1.

OPERATING

P. H. Wright, telephone supervisor of the Atlantic Coast Line at Jacksonville, Fla., has been appointed assistant superintendent of telegraph, with headquarters at Savannah, Ga.

E. H. Powell, trainmaster of the Wilmington district of the Atlantic Coast Line, has been appointed supervisor of rail terminals, Office of Defense Transportation, with headquarters at Columbia, S. C.

Earl H. Campbell, whose promotion to terminal superintendent of the Missouri

Earl H. Campbell

Pacific with headquarters at Kansas City, Mo., was reported in the *Railway Age* of January 16, was born at Fredonia, Kan., on July 22, 1890. He entered railroad service in August, 1907, as a yard clerk of the St. Louis & San Francisco at Sapulpa, Okla., and served in various other capacities before resigning to enter contracting work in the oil industry. In June, 1914, Mr. Campbell became a switchman of the Missouri Pacific at Kansas City, being promoted to assistant yardmaster in 1925, and successively to assistant general yardmaster, night general yardmaster, day general yardmaster, trainmaster and acting terminal superintendent.

Richard J. Hohmann, revising clerk in the office of the superintendent of transportation of the Alton at Chicago, has been promoted to car accountant of the Baltimore & Ohio Chicago Terminal, with the same headquarters.

Alex B. Burpee, whose promotion to superintendent of transportation of the Western lines of the Canadian Pacific, with headquarters at Winnipeg, Man., was reported in the *Railway Age* of January 9, was born on July 7, 1886, at Grand Falls, N. B. He entered railroad service with the Canadian Pacific on July 1, 1901, as a clerk of the roadmaster's office at McAdam, N. B., and in 1904 became a stenographer of the superintendent's office at Brownville,

Alex B. Burpee

Me. He held several other positions between 1904 and 1912, being transferred to the Western lines and advanced to dispatcher at Medicine Hat, Alta., on June 30, 1912. Mr. Burpee was promoted to chief dispatcher at Cranbrook, B. C., on January 1, 1926, and was transferred to Calgary, Alta., on August 21, 1926. In 1928 he was advanced to transportation assistant with the same headquarters, and, on January 7, 1938, was promoted to inspector of transportation, Western lines, with headquarters at Winnipeg, holding that position until his present appointment.

Joseph R. Thexton, whose promotion to superintendent of the Morris and Essex division of the Delaware, Lackawanna & Western, with headquarters at Hoboken, N. J., was announced in the *Railway Age* of January 9, entered the service of the D. L. & W. in April, 1906, as a messenger in the freight office at Buffalo, N. Y., becoming file and time clerk in the superintendent's office in December, 1907. In April, 1910, Mr. Thexton was transferred to the engineering department as a rodman and instrumentman at Buffalo. From October, 1914, to March, 1916, he was baggage agent at Elmira, N. Y., and Buffalo, subsequently becoming efficiency clerk at East Buffalo, N. Y. He advanced to yardmaster at East Buffalo in April, 1920, be-

Joseph R. Thexton

came a general yardmaster at Syracuse, N. Y., in 1926, and in December, 1935, he was appointed special representative on the staff of the general superintendent at Scranton, Pa. Mr. Thexton became terminal trainmaster at East Buffalo in January, 1940, and in January, 1941, he was transferred to the Morris and Essex division at Hoboken, where he remained until his recent appointment to superintendent at that point.

J. F. Pringle, chief of transportation of the Canadian National System, at Montreal, Que., has been appointed general manager of the Atlantic region, with headquarters at Moncton, N. B. He is succeeded as chief of transportation at Montreal by **J. P. Johnson,** formerly general superintendent of the Southern Ontario district at Toronto, Ont. **Frank Griffin,** superintendent of the Edmundston division, Atlantic region, at Edmundston, N. B., has been appointed general superintendent of the Northern On-

Robert B. Graham

tario district, with headquarters at North Bay, Ont., succeeding **George A. Stokes,** who has been transferred to the Southern Ontario district at Toronto, succeeding Mr. Johnson. **Robert B. Graham,** acting superintendent at Moncton, has been appoint-

ed superintendent at Edmundston, succeeding Mr. Griffin, and **J. C. A. Berube,** chief timekeeper at Moncton, has been appointed assistant superintendent of the Moncton division. Mr. Johnson commenced his railroad career in 1905 as a telegrapher of the Portland division of the Grand

J. P. Johnson

Trunk, and subsequently was promoted to train dispatcher at Island Pond, Vt. In 1941, after serving in official capacities with the Canadian National in various parts of Canada, he was appointed general superintendent of the Southern Ontario district at Toronto, which position he was holding at the time of his recent promotion to chief of transportation at Montreal.

Mr. Griffin, a native of Quebec, Que., entered railroad service in July, 1900, as secretary and chief clerk in the office of the general superintendent of the Quebec & Lake St. John (now Canadian National), and has since been employed in railroad work in Quebec and New Brunswick. The Edmondston division, over which Mr. Griffin now has jurisdiction, is an important traffic area through which a considerable tonnage of wartime freight moves.

Mr. Graham, who was born at Main

Frank Griffin

River, N. B., entered railway service on April 15, 1912, as relieving telegraph operator of the Canadian National, serving at various points along the north shore of New Brunswick, and in May, 1933, he was promoted to dispatch-operator at Campbellton, N. B. He served as transportation clerk in the office of the general superintendent of transportation at Moncton from August, 1936, to February, 1937, when he was appointed assistant superintendent of the Edmundston division at South Devon, N. B. Mr. Graham was transferred to the Moncton division on August 1, 1939, and remained there until his recent appointment as superintendent at Edmundston.

N. M. Lawrence, division superintendent of the Pennsylvania at Columbus, Ohio, has been transferred to the Buffalo division, succeeding **C. E. Alexander,** whose headquarters had been at Buffalo, N. Y.

E. W. Davis, trainmaster of the Toledo division of the Pennsylvania, has been appointed night trainmaster of the Columbus division, with headquarters at Columbus, Ohio, a newly-created position. **W. P. Primm,** road foreman of engines, has been promoted to trainmaster-road foreman of engines, with headquarters at Toledo, Ohio.

F. R. Micheal, division engineer of the Wabash at Moberly, Mo., has been promoted to engineer of track with headquarters at St. Louis, Mo. He succeeds **Charles T. Warren,** who has entered military service. **G. F. Rothwell,** first assistant engineer at Moberly, succeeds Mr. Micheal.

T. J. Peters, assistant trainmaster of the Grande Junction division of the Denver & Rio Grande Western, has been promoted to trainmaster at Glenwood Springs, Colo., succeeding **W. M. Henderson,** who has been transferred to Salida, Colo., replacing **V. H. McGinnis,** who has been appointed trainmaster and road foreman of equipment at Grand Junction, Colo.

D. G. Kissick, rule instructor, of the Western region of the Canadian National, has been promoted to assistant superintendent at Winnipeg, Man., relieving **J. C. Crombie,** who has been transferred to Port Arthur, Ont., succeeding **A. B. Banner,** whose transfer to Prince George, B. C., was reported in the *Railway Age* of December 19.

S. L. Barksdale, assistant chief train dispatcher of the Chesapeake & Ohio, has been appointed assistant trainmaster of the Peninsula sub-division, with headquarters at Newport News, Va., succeeding **R. L. Bryant,** who has been promoted to trainmaster of the Peninsula sub-division, with headquarters at Richmond, Va., succeeding **T. C. Davis,** who has been appointed terminal trainmaster of the Richmond terminal at Richmond.

TRAFFIC

John F. Levin has been appointed traffic manager of the Detroit & Mackinac, with headquarters at Alpena, Mich.

A. H. Dorman has been appointed assistant general freight agent of the Detroit & Toledo Shore Line, with headquarters at Detroit, Mich.

A. J. Galan, commerce agent of the Southern Pacific at San Francisco, Cal., has been promoted to assistant general freight agent at Portland, Ore., succeeding **M. W. Ehmke,** who has been transferred to San Francisco.

E. B. Hoskins, commerce agent of the Pennsylvania, has been appointed assistant general freight agent, with headquarters as before at Philadelphia, Pa., succeeding **W. C. Glynn,** who has retired, under the Pennsylvania's pension regulations, after almost 52 years of service.

H. H. Clapp, commercial agent of the Virginian, with headquarters at Cincinnati, Ohio, has been promoted to general agent with headquarters at Detroit, Mich. He relieves **J. W. Tumlin,** who has been granted leave of absence to enter the armed forces.

Herman Eldridge Pleasants, whose appointment to general passenger agent of the Seaboard Air Line, with headquarters at Atlanta, Ga., was announced in the *Railway Age* of January 16, was born on May 24, 1889, at Aberdeen, N. C. Mr. Pleasants entered railroad service on Au-

Herman E. Pleasants

gust 14, 1905, as assistant mail clerk of the Seaboard Air Line at Portsmouth, Va. In October, 1913, after serving as file clerk, mail clerk, ticket stock clerk and rate and division clerk, he was appointed traveling freight and passenger agent at Wilmington, N. C. In September, 1917, he became advertising clerk at Norfolk, Va., remaining there until he was appointed traveling passenger agent at Charlotte, N. C. In 1923 he went to Birmingham, Ala., as district passenger agent, and shortly thereafter was sent to Chicago as Northwestern passenger agent. In March, 1926, he was appointed assistant general passenger agent at Atlanta, being transferred to Savannah, Ga., in 1927, and thence to Raleigh, N. C. In June, 1935, Mr. Pleasants was transferred back to Atlanta, in which position he remained until his recent appointment.

Daniel L. Norton, general agent of the Delaware, Lackawanna & Western at Albany, N. Y., has been transferred to Toledo, Ohio, succeeding **Charles R. Hartshorn,** who has been promoted to assistant general freight agent at Chicago. **Henry R. O'Hara,** freight representative at Syracuse, N. Y., has been promoted to general agent at Albany, succeeding Mr. Norton.

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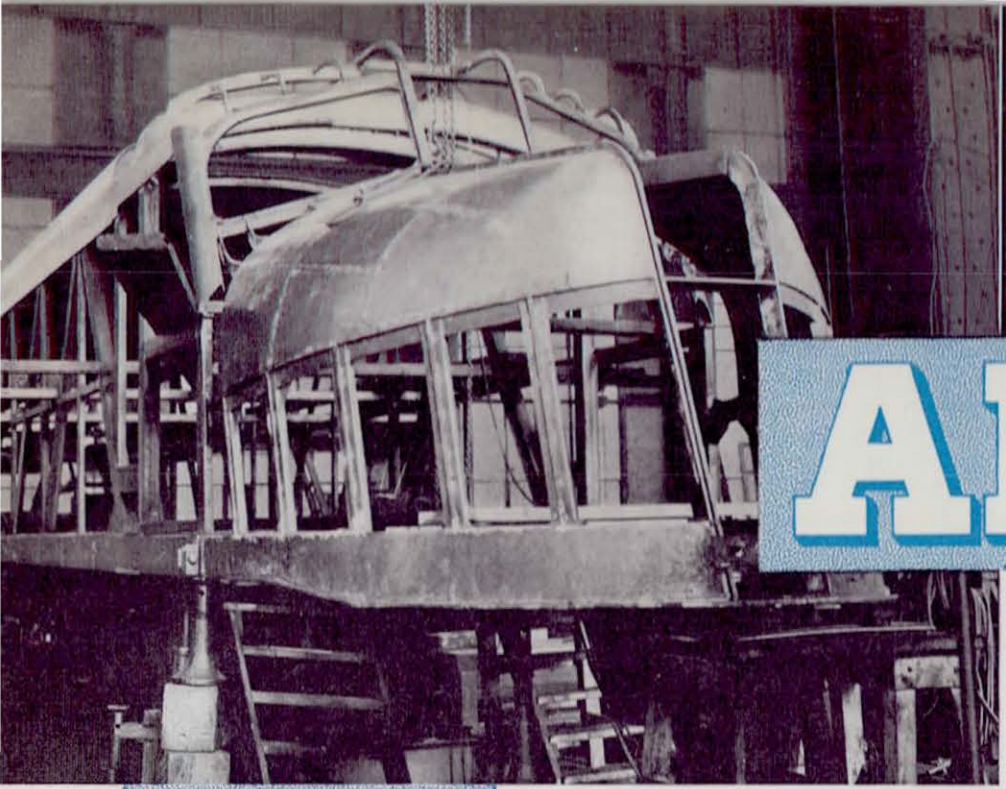
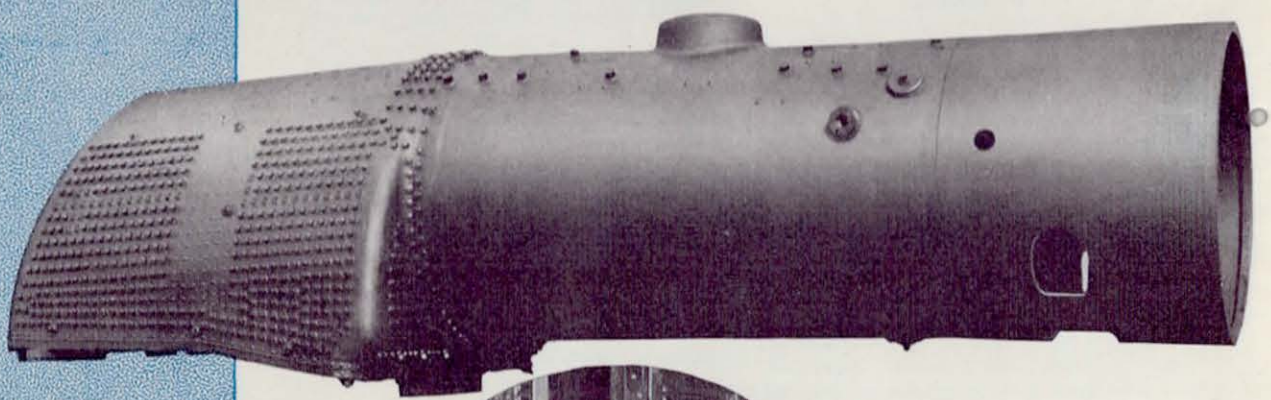
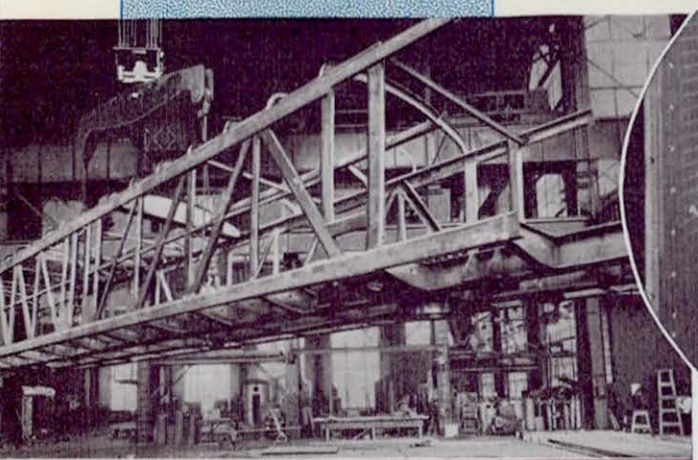
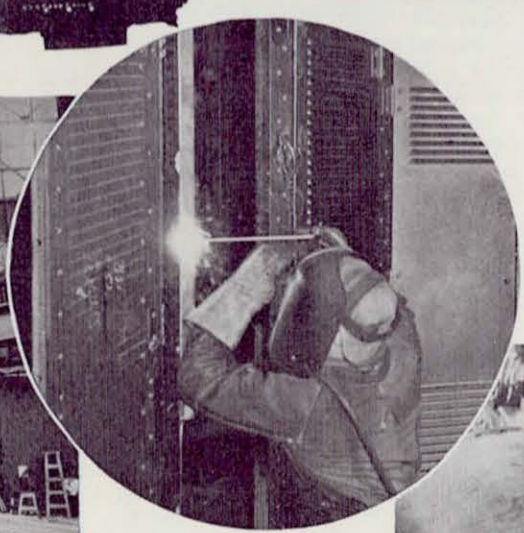
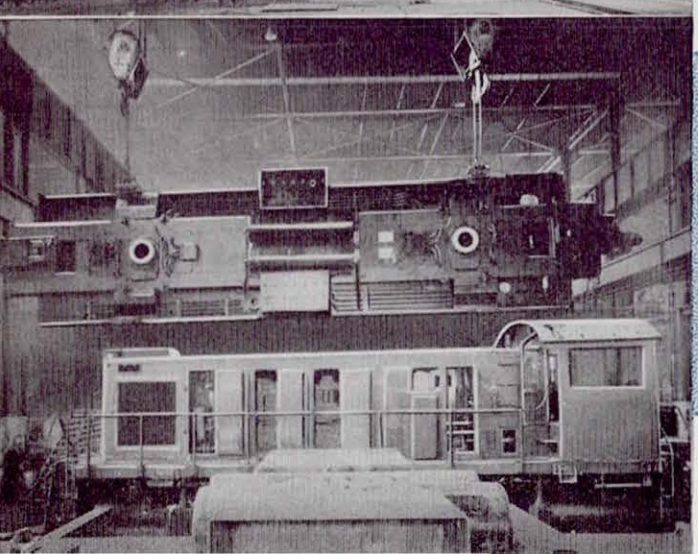


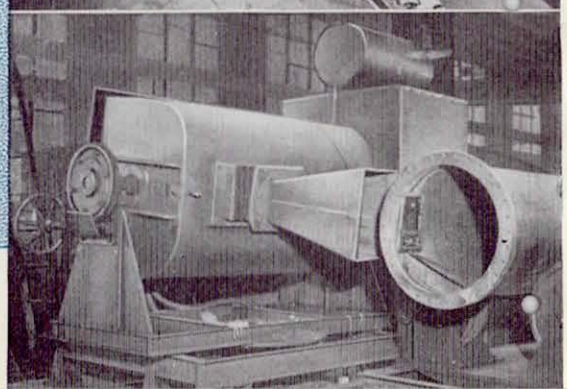
ALCO

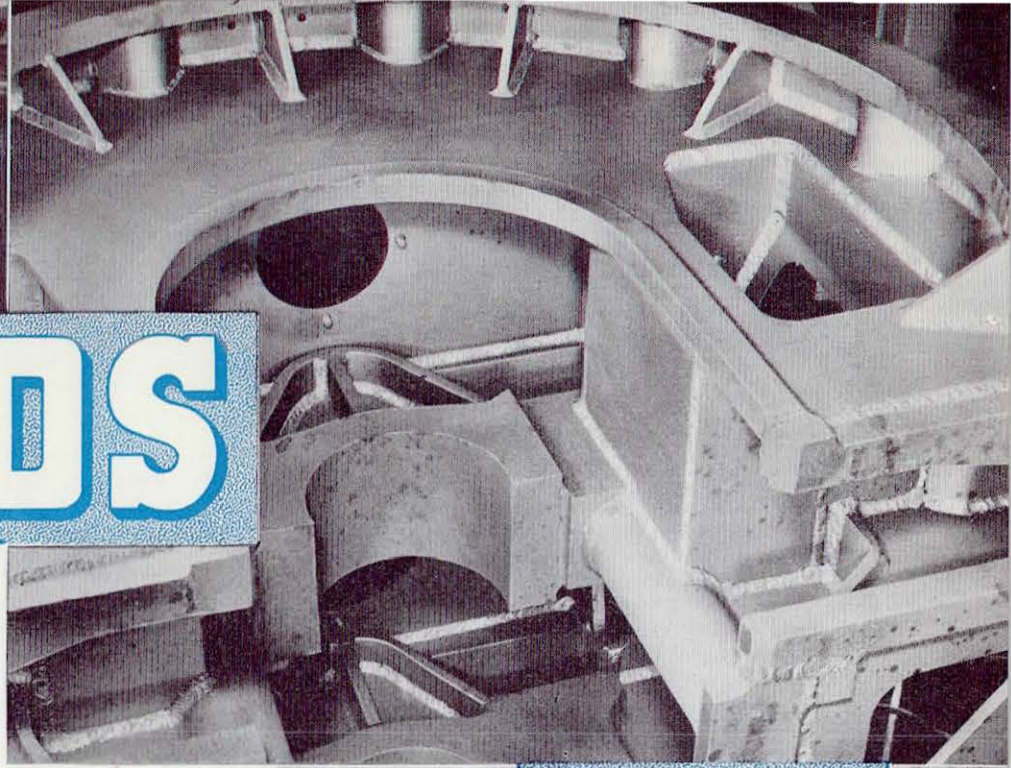












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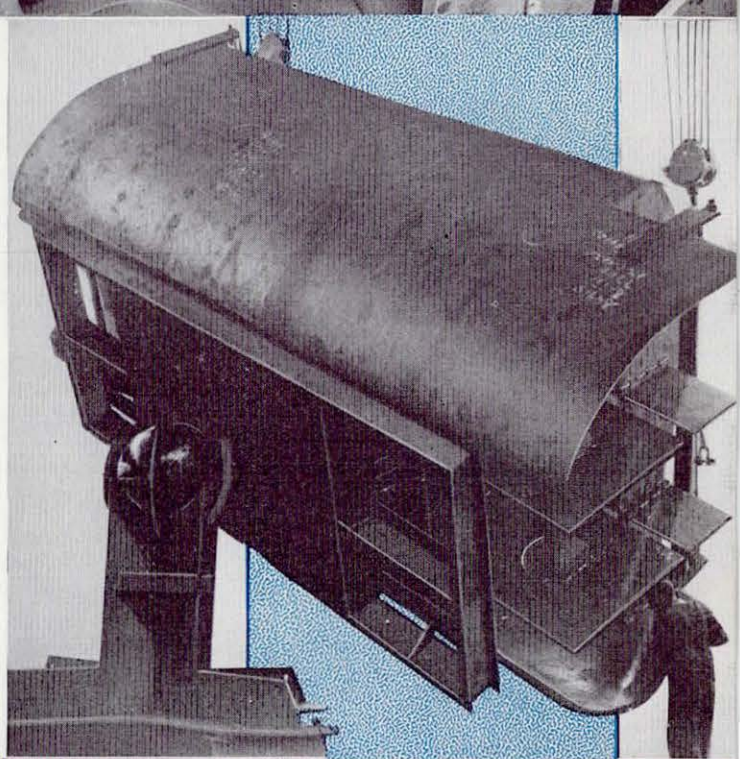
In other words, in Alco welding, all possible precautions known to the welding fraternity to insure good welds are observed.

All this plus an experience from the early beginnings of the welding art.



AMERICAN LOCOMOTIVE

Manufacturers of Mobile Power

Steam, Diesel and Electric Locomotives, Marine Diesels, Tanks, Gun Carriages and other Ordnance

George R. Marr, city freight agent at Brooklyn, N. Y., has been advanced to division freight agent, with headquarters at Newark, N. J., succeeding **T. L. Steele,** who has resigned from that position.

ENGINEERING & SIGNALING

F. A. Poling has been appointed assistant to the engineer maintenance of way and structures of the Wheeling & Lake Erie, a newly created position, with headquarters at Brewster, Ohio.

Frank B. Baldwin, engineer of inventories of the Atchison, Topeka & Santa Fe, with headquarters at Chicago, has been promoted to valuation engineer of the Santa Fe system, with the same headquarters, succeeding **Joseph Weidel,** who retired on January 16. Mr. Baldwin was born at Ellisville, Ill., in 1884, and graduated in civil engineering from the University of Illinois in 1909, later attending the Kent College of Law at Chicago. He entered railway service in 1907 during a summer vacation from school as a masonry inspector on the Santa Fe at Chillicothe, Ill., and

Frank B. Baldwin

following graduation he returned to the Santa Fe as a rodman at La Plata, Mo. From 1910 to 1911 he worked for the Missouri Valley Bridge & Iron Co., and the Illinois Highway Commission and in September, 1911, he returned to the Santa Fe as a draftsman at Topeka, Kan. In 1915 Mr. Baldwin was transferred to the valuation department and has since been in intimate contact with all phases of valuation work. He has represented the valuation department of the Santa Fe before the Interstate Commerce Commission on numerous occasions.

Mr. Weidel was born in Lafayette county, Tex., on February 22, 1873, and entered railroad service in 1900 as a chainman on the Santa Fe at Pueblo, Colo., later being advanced successively to draftsman, instrumentman and assistant engineer on various work in Colorado and New Mexico. In 1902, he went with the Mexican Central (now a part of the National Railways of Mexico) as resident engineer and in 1904 he returned to the Santa Fe as an assistant engineer with headquarters at La Junta, Colo. In 1906 he was employed on railroad construction work in the sugar beet territory of eastern Colorado and in 1907 he returned to the Santa Fe as engineer in charge of the construction of the Raton tunnel at Raton Pass, N. M. In 1911, Mr. Weidel was transferred to Topeka, Kan., being advanced to system valuation engineer in 1915.

MECHANICAL

J. T. Gaghen has been appointed master mechanic of the Illinois Terminal at Alton, Ill.

Manuel Manillasin has been appointed superintendent of motive power of the Southern Pacific of Mexico, with headquarters at Empalme, Son., succeeding **M. L. Verdugo.**

V. H. Jenkins has been appointed supervisor maintenance of equipment of the Texas & Pacific with headquarters at Dallas, Texas, succeeding **F. H. Cowan,** assigned to other duties.

OBITUARY

J. R. Ivey, assistant superintendent of telegraph of the Atlantic Coast Line at Savannah, Ga., died on December 2.

William Jacob, mechanical engineer of the Pere Marquette, with headquarters at Detroit, Mich., died on January 6 in a hospital at Ann Arbor, Mich.

John A. Gallaher, commerce attorney of the Denver & Rio Grande, died suddenly on December 20 in a hospital at Denver, Colo.

H. J. Hunke, supervisor of reclamation of the New York, Chicago & St. Louis, with headquarters at Lima, Ohio, died on January 8.

George E. Smith, industrial agent of the New York Central at Chicago since March 1, 1930, died on January 8. He had been connected with the N. Y. C. since 1920.

James S. Hickey, auditor of agencies of the Canadian Pacific at Montreal, Que., died on January 12, at Montreal. Mr. Hickey, who was in his 65th year, had served as auditor of agencies since 1939.

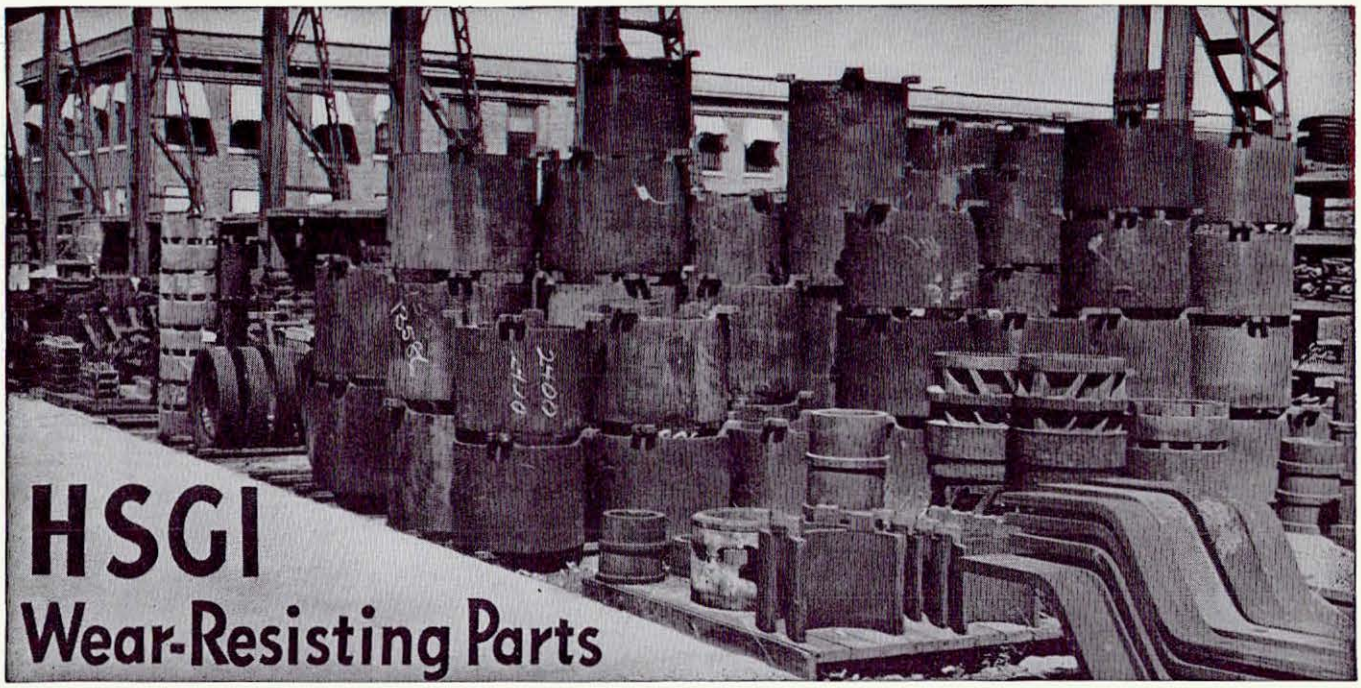
William J. Hobbs, retired vice-president of finance of the Boston & Maine, died on January 13, at Malden, Mass. Born at Wells, Me., Mr. Hobbs would have been 89 years old on January 16. He entered railway service in 1872 as a clerk in the office of the auditor of the Eastern railroad (now Boston & Maine), and served that road in various capacities until it was absorbed by the Boston & Maine in 1884, when he became auditor of the B. & M. Mr. Hobbs served as vice-president of finance of the Boston & Maine at Boston, Mass., from 1912 until his retirement from active service in March, 1930.

Herman M. Moors, general freight claim agent of the Southern Pacific Lines in Texas and Louisiana, with headquarters at Houston, Tex., died suddenly on January 14, while on a visit to San Antonio, Tex. He was born on July 18, 1880, at Galveston, Tex., and entered railroad service in August, 1897, with the joint agency of the Galveston, Houston & Henderson (now a part of the Southern Pacific Lines in Texas and Louisiana), the International-Great Northern, and the Missouri-Kansas-Texas, at Galveston. In October, 1901, he became a general clerk of the M.-K.-T., at St. Louis, Mo., and one year later was appointed claim investigator of the San Antonio & Aransas Pass (now a part of the Southern Pacific Lines in Texas and Louisiana). In November, 1908, Mr. Moors was appointed freight claim agent of the Southern Pacific Lines in Texas and Louisiana, being promoted to general freight claim agent in May, 1934.

Leroy Allebach, assistant general attorney of the New York Central system, with headquarters at Charleston, W. Va., died at that city on January 17 at the age of 62.

Henry C. Nutt, retired president and general manager of the Monongahela and of the Pittsburgh, Chartiers & Youghiogheny, died at Cambridge, Mass., on September 26. (The death of Mr. Nutt was brought to the attention of the *Railway Age* only during the past week.—Ed. Note.) Born on November 12, 1863, at Council Bluffs, Ia., Mr. Nutt entered railway service in 1883 as a rodman of the Burlington & Missouri (now Chicago, Burlington & Quincy) shortly after receiving his Ph.B. degree from Yale university. In 1890, after serving in various capacities in the engineering department, he became trainmaster at Alliance, Neb., and in 1892 was appointed assistant superintendent at Edgemont, S. D., being transferred to Sheridan, Wyo., in 1893. In 1900 he went with the Chicago, Burlington & Quincy as assistant superintendent at Burlington, Ia. He was promoted to general superintendent at that point in 1903, and was transferred to St. Louis, Mo., in 1905. He served as general superintendent of the Michigan Central at Detroit, Mich., from 1906 until 1907, when he became general manager of the Western lines of the Northern Pacific at Tacoma, Wash., leaving that road in 1912 to serve as general manager of the San Pedro, Los Angeles & Salt Lake (now Union Pacific) at Los Angeles, Cal. In 1918 he was commissioned a major in the United States Army Engineering Corps, A. E. F., and served in France on the staffs of the commanding general of Base Section No. 1 at St. Nazaire; director general of transportation and commanding general S. O. S., at Tours, and the commanding general of the First Army, at Souilly. He was assistant deputy general of transportation at Verdun and served as colonel of the Transportation Corps and on the staff of the commanding general of the Army of Occupation at Coblenz, Germany. From 1919 to 1920, he was president of the Coal Commission for Central Europe at Mahrisch-Ostrau, Czechoslovakia. Mr. Nutt became president and general manager of the Monongahela and the Pittsburgh, Chartiers & Youghiogheny at Pittsburgh, Pa., in 1921, and retired from active service in 1933.

Table of Operating Revenues appears on next left-hand page



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Due to its super wear-resisting properties HUNT-SPILLER *Air Furnace* GUN IRON is playing a big part in the battle to conserve materials.

Fewer replacements are necessary—this means fewer maintenance items and greater monthly mileage from each locomotive.

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Operating Revenues and Operating Expenses of Class I Steam Railways

Compiled from 133 Monthly Reports of Revenues and Expenses Representing 136 Class I Steam Railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF NOVEMBER, 1942 AND 1941

Item	United States		Eastern District		Southern District		Western District	
	1942	1941	1942	1941	1942	1941	1942	1941
Miles of road operated at close of month	230,176	231,961	56,781	57,091	43,580	43,985	129,815	130,885
Revenues:								
Freight	$534,762,351	$385,240,971	$207,114,948	$161,684,155	$104,579,443	$76,416,548	$223,067,960	$147,140,268
Passenger	108,060,404	40,518,769	44,034,573	21,353,083	22,099,334	6,598,383	41,926,497	12,567,303
Mail	9,773,585	9,150,279	3,464,078	3,353,073	1,764,030	1,579,932	4,545,477	4,217,274
Express	10,347,087	3,076,587	3,906,694	898,705	1,460,137	639,497	4,980,256	1,538,385
All other operating revenues	27,164,701	19,025,247	11,534,435	9,299,032	3,589,927	2,399,789	12,040,339	7,326,426
Railway operating revenues	690,108,128	457,011,853	270,054,728	196,588,048	133,492,871	87,634,149	286,560,529	172,789,656
Expenses:								
Maintenance of way and structures	71,213,130	53,965,478	28,623,418	21,390,811	12,335,480	9,140,439	30,254,232	23,434,228
Maintenance of equipment	104,892,969	91,040,655	45,400,426	41,623,618	20,594,731	16,832,321	38,897,812	32,584,716
Traffic	10,067,141	9,744,393	3,752,403	3,461,511	1,925,895	1,897,610	4,388,843	4,385,272
Transportation—Rail line	199,079,787	164,523,655	87,242,381	74,717,245	33,639,636	26,897,315	78,197,770	62,909,095
Transportation—Water line	*d*28,074	14,722	.....	.....	.....	.....	*d*28,074	14,722
Miscellaneous operations	7,678,274	4,292,212	2,778,358	1,886,496	1,199,553	567,088	3,700,363	1,838,628
General	13,485,967	12,414,751	5,509,194	4,929,727	2,558,737	2,318,447	5,418,036	5,166,577
Transportation for investment—Cr*	.....	381,751	.....	97,532	.....	57,381	.....	226,838
Railway operating expenses	406,389,194	335,614,115	173,306,180	147,911,876	72,254,032	57,595,839	160,828,982	130,106,400
Net revenue from railway operations	283,718,934	121,397,738	96,748,548	48,676,172	61,238,839	30,038,310	125,731,547	42,683,256
Railway tax accruals	118,720,934	40,417,603	39,509,610	16,903,427	30,422,666	10,416,790	48,788,658	13,097,386
Railway operating income	164,998,000	80,980,135	57,238,938	31,772,745	30,816,173	19,621,520	76,942,889	29,585,870
Equipment rents—Dr. balance	12,378,345	9,099,041	4,923,457	4,821,447	816,220	*d*123,832	6,638,668	4,401,426
Joint facility rent—Dr. balance	3,670,657	2,948,075	1,706,488	1,603,042	408,640	298,439	1,555,529	1,046,594
Net railway operating income	148,948,998	68,933,019	50,608,993	25,348,256	29,591,313	19,446,913	68,748,692	24,137,850
Ratio of expenses to revenues (per cent)	58.9	73.4	64.2	75.2	54.1	65.7	56.1	75.3
Depreciation included in operating expenses	21,081,589	17,980,730	9,416,010	7,777,538	3,880,420	3,570,681	7,785,159	6,632,511
Amortization of defense projects	11,020,498	1,861,862	3,868,864	250,971	3,442,017	304,163	3,709,617	1,306,728
Pay roll taxes	14,822,756	12,928,700	6,379,426	5,672,868	2,578,430	2,223,442	5,864,900	5,032,390
All other taxes**	103,989,178	27,488,903	33,130,184	11,230,559	27,844,236	8,193,348	42,923,758	8,064,996

FOR ELEVEN MONTHS ENDED WITH NOVEMBER, 1942 AND 1941

Miles of road operated at close of month‡	231,101	232,220	56,878	57,202	43,770	44,140	130,453	130,878
Revenues:								
Freight	$5,412,824,390	$4,058,345,607	$2,189,111,437	$1,733,588,666	$1,051,480,177	$790,330,172	$2,172,232,776	$1,534,426,769
Passenger	909,034,896	460,818,745	418,622,565	237,900,884	176,510,220	76,987,381	313,902,111	145,930,480
Mail	98,276,855	96,012,572	35,691,744	35,521,018	17,597,153	16,455,083	44,987,958	44,036,471
Express	85,728,625	51,505,633	31,650,416	20,152,594	13,625,107	10,168,747	40,453,102	21,184,292
All other operating revenues	257,367,017	200,457,287	117,908,809	98,023,995	33,283,962	24,557,982	106,174,246	77,875,310
Railway operating revenues	6,763,231,783	4,867,139,844	2,792,984,971	2,125,187,157	1,292,496,619	918,499,365	2,677,750,193	1,823,453,322
Expenses:								
Maintenance of way and structures	723,503,476	547,226,198	293,277,307	221,744,743	125,503,922	95,027,310	304,722,247	230,454,145
Maintenance of equipment	1,100,242,329	899,067,647	488,946,522	418,664,493	211,393,841	166,600,181	399,901,966	313,802,973
Traffic	107,193,608	102,083,651	39,022,900	36,577,676	20,979,031	19,932,328	47,191,677	45,573,647
Transportation—Rail line	2,027,545,725	1,595,623,021	917,845,613	735,572,606	344,330,807	266,333,694	765,369,305	593,716,721
Transportation—Water line	*d*2,023	3,116,808	.....	.....	.....	.....	*d*2,023	3,116,808
Miscellaneous operations	67,551,009	42,549,720	26,529,754	18,363,879	10,775,671	5,985,148	30,245,584	18,200,693
General	143,522,820	125,554,113	57,765,147	49,570,249	27,657,598	24,431,418	58,100,075	51,552,446
Transportation for investment—Cr*	.....	3,578,011	.....	635,032	.....	645,233	.....	2,297,746
Railway operating expenses	4,169,556,944	3,311,643,147	1,823,387,243	1,479,858,614	740,640,870	577,664,846	1,605,528,831	1,254,119,687
Net revenue from railway operations	2,593,674,839	1,555,496,697	969,597,728	645,328,543	551,855,749	340,834,519	1,072,221,362	569,333,635
Railway tax accruals	1,119,912,374	512,464,690	420,233,410	215,981,742	286,868,585	128,200,245	412,810,379	168,282,703
Railway operating income	1,473,762,465	1,043,032,007	549,364,318	429,346,801	264,987,164	212,634,274	659,410,983	401,050,932
Equipment rents—Dr. balance	128,965,678	93,274,167	60,477,787	45,245,213	7,282,895	745,025	61,204,996	47,283,929
Joint facility rent—Dr. balance	35,754,910	30,803,540	18,552,599	16,770,078	3,949,063	3,389,167	13,253,248	10,644,295
Net railway operating income	1,309,041,877	918,954,300	470,333,932	367,331,510	253,755,206	208,500,082	584,952,739	343,122,708
Ratio of expenses to revenues (per cent)	61.7	68.0	65.3	69.6	57.3	62.9	60.0	68.8
Depreciation included in operating expenses	228,342,394	197,707,490	105,332,440	86,791,564	43,521,863	39,727,067	79,488,091	71,188,859
Amortization of defense projects	76,730,883	4,172,420	25,360,966	714,745	20,796,817	810,378	30,573,100	2,647,297
Pay roll taxes	155,566,118	124,439,358	67,860,233	55,421,451	27,377,359	21,515,707	60,328,526	47,502,200
All other taxes†	964,346,256	388,025,332	352,373,177	160,560,291	259,491,226	106,684,538	352,481,853	120,780,503

d Decrease, deficit, or other reverse items.

‡ Represents an average of the mileage reported at the close of each month within the period.

* General Account VIII. Transportation for Investment—Cr. canceled effective January 1, 1942.

** Includes Federal income tax, surtax and excess profits tax as follows: United States, $78,821,220; Eastern District, $22,840,759; Pocahontas Region, $8,462,966; Southern Region, $13,534,971, and Western District, $33,982,524, for November, 1942.

† Includes Federal income tax, surtax and excess profits tax as follows: United States, $713,077,681; Eastern District, $243,125,266; Pocahontas Region, $85,860,832; Southern Region, $122,463,900 and Western District, $261,627,683, for the 1942 period.

*Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. **Subject to revision.***

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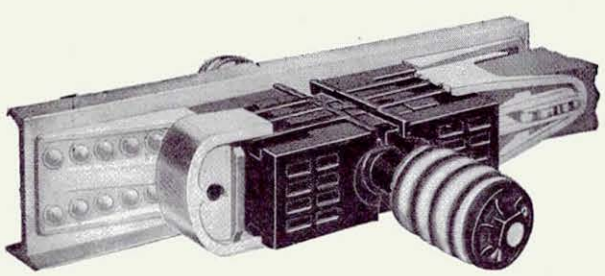

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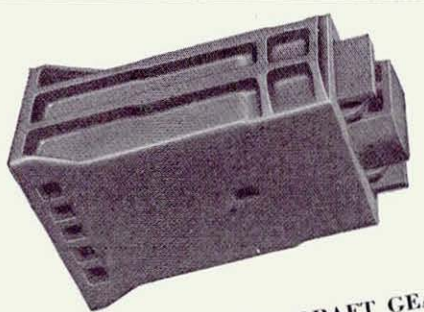

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The OHIO LOCOMOTIVE CRANE Co. BUCYRUS OHIO

It's **OKONITE**–
That's all you need to know about your insulated wire and cable

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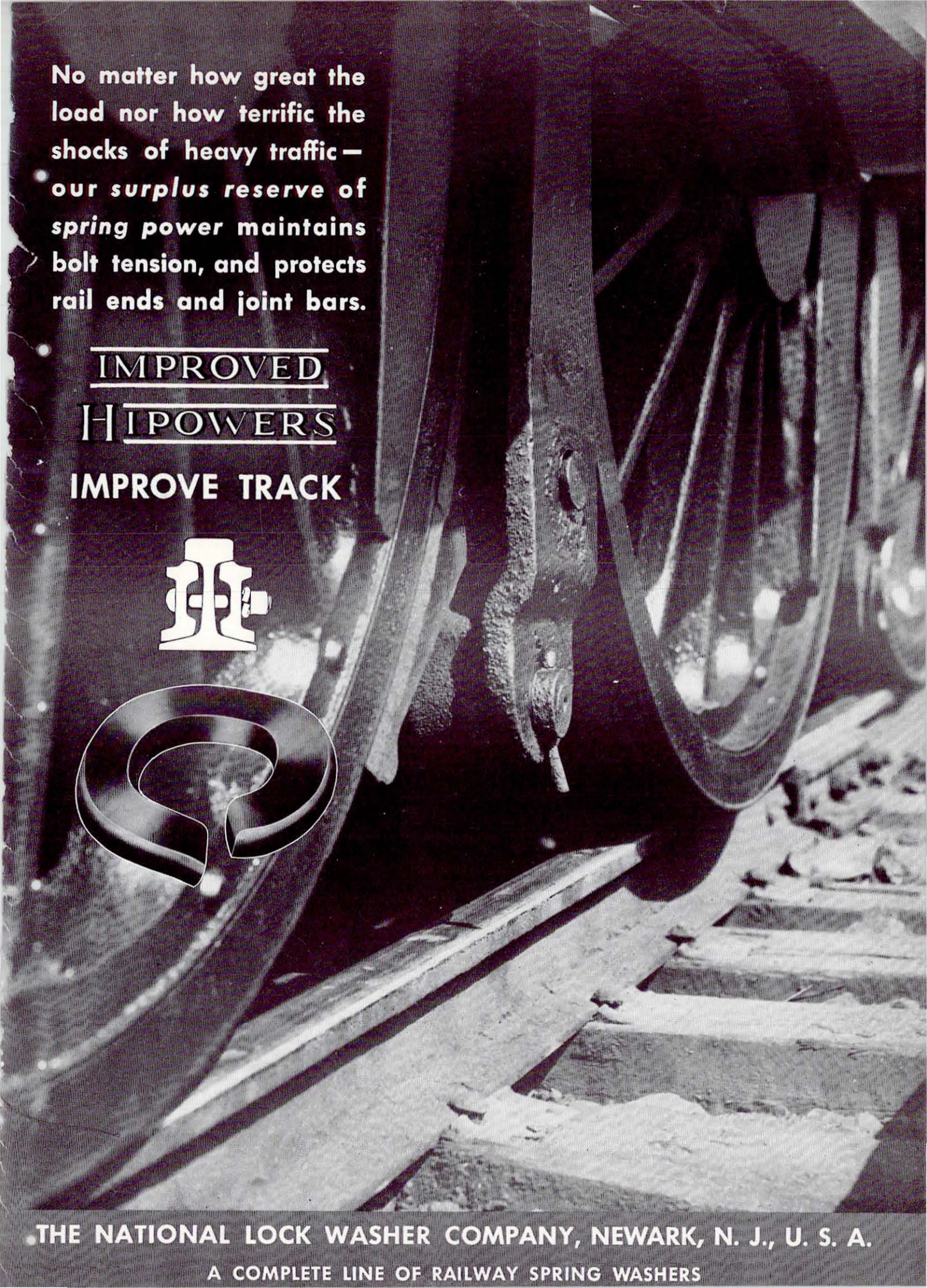
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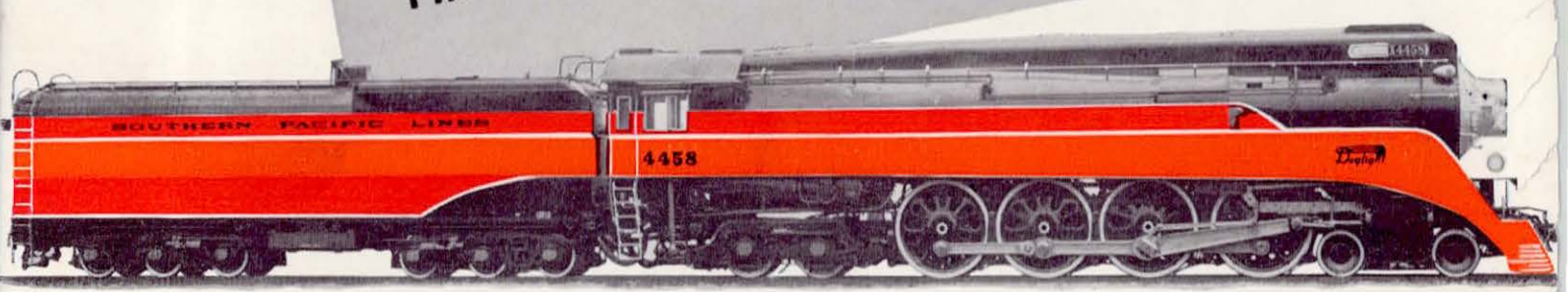

In addition the Southern Pacific is operating 26 Timken Bearing Equipped Pullman cars on its two "Lark" trains running between these two cities, and 28 Timken Bearing Equipped Pullman cars on the "Golden State Limited" operated jointly by the Southern Pacific and Rock Island between Los Angeles and Chicago.

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